

REDACTED VERSIONUNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

7 ASETEK DANMARK A/S,

8 Plaintiff,

9 v.

10 COOLIT SYSTEMS INC, et al.,

11 Defendants.

Case No. [19-cv-00410-EMC](#)**FILED UNDER SEAL****ORDER GRANTING IN PART AND
DENYING IN PART PARTIES'
MOTIONS IN LIMINE AND MOTIONS
TO STRIKE**

Docket Nos. 389, 391, 393, 397, 399-402, 405

I. INTRODUCTION

Plaintiff Asetek Danmark AS (“Asetek”) filed suit against CoolIT Systems, Inc. and its subsidiaries and Corsair Gaming, Inc. and its U.S. subsidiaries (collectively “CoolIT”), asserting that CoolIT infringed and continues to infringe five of its patents — *i.e.*, the ‘601, ‘196, ‘362, ‘354 and ‘355 patents (collectively “CoolIT Patents”). CoolIT counterclaimed, alleging that Asetek infringed four of CoolIT’s patents — *i.e.*, the ‘330, ‘284, ‘266, and ‘567 patents. All of the allegedly infringed patents relate to liquid cooling systems and methods for cooling heat-generating electronic components. At issue are various motions to strike and motions in limine.

II. FACTUAL & PROCEDURAL BACKGROUND

On January 23, 2019, Asetek filed this lawsuit against CoolIT. *See* Docket No. 1. Asetek’s patented combination of a pump, a dual-chambered reservoir, and a cold plate into a single pump unit allows improved efficiency and compactness that enables the pump unit to be installed directly on the CPU/GPU of a computer motherboard, graphics card, or a server, have decreased risk of coolant leakage, is easy to install and use, is simpler, and less costly. Docket No. 228 (SAC) at 4. CoolIT counterclaimed on April 11, 2019, alleging that Asetek’s Gen 4, Gen 5,

1 Gen 6, and Gen 7 products infringe its own patents — *i.e.*, the ‘330, ‘284, ‘266, and ‘567
2 patents—which claim a fluid heat exchanger. *See* Docket No. 23; Docket No. 333 (Fourth
3 Amended Counterclaim) at 14.

4 On December 22, 2020, this Court issued a minute order consolidating this case with the
5 related case of *Asetek Danmark A/S v. Corsair Gaming, Inc. et al.*, Case No. 3:20-cv-06541-EMC,
6 which asserted many of the same patents as this case. *See* Docket No. 207 at 1. SAC at 2-4.
7 Therefore, the consolidated complaint (“SAC”) alleges infringement against CoolIT and Corsair, a
8 provider of gaming and streaming products. *See* SAC.

9 The ‘354 and ‘355 patents were later found unpatentable by the Patent Trial and Appeal
10 Board (“PTAB”), and Asetek appealed to the Federal Circuit. *See* Docket No. 380 (Order to Stay)
11 at 3, n.2; Docket No. 465 (Joint Case Management Statement) at 5. There is a pending *inter*
12 *partes review* (“IPR”) of the ‘601 and ‘196 patents. Joint Case Management Statement at 3. On
13 September 30, 2021 and October 12, 2021, the ‘567 patent and some claims of the ‘266 Patents
14 were found unpatentable by the PTAB and are subject to an appeal. *Id.* This Court granted a
15 partial stay of litigation on February 10, 2022 as to Asetek’s ‘354, ‘355, ‘601, and ‘196 patents
16 and CoolIT’s ‘567 patent, pending inter partes review of the ‘601 and ‘196 patents. *See* Order to
17 Stay at 1. The stay did not affect the litigation as to Asetek’s ‘362 Patent and CoolIT’s ‘330, ‘284,
18 and ‘266 Patents currently at issue as they are not presently subject to IPR. *See id.*

19 A. The ‘362 Patent

20 The ‘362 Patent claims an invention over prior art liquid cooling systems that were often
21 bulky with many components, which increased the total installation time, size, and risk of leakage.
22 Docket No. 1-1 (the ‘362 Patent) at 1:41-49. Asetek overcame this problem with a small and
23 compact design that is more efficient, easy to use and implement, and requires a low level of
24 maintenance. *Id.* at 1:53-52.

25 Only claims 17 and 19 are at issue in this case:

26 17. A method of operating a liquid cooling system for an electronic
27 component positioned on a motherboard of a computer system,
comprising:
28 separably thermally coupling a heat exchanging interface of a

reservoir with the electronic component positioned at a first location on the motherboard, the **reservoir including an upper chamber and a lower chamber**, the upper chamber and the lower chamber being separate chambers that are vertically spaced apart and separated by at least a horizontal wall, the upper chamber and the lower chamber being fluidly coupled by one or more passageways, at least one of the one or more passageways being positioned on the horizontal wall, the heat exchanging interface being removably coupled to the reservoir such that an inside surface of the heat exchanging interface is exposed to the lower chamber of the reservoir;

positioning a heat radiator at a second location horizontally spaced apart from the first location, the heat radiator and the reservoir being fluidly coupled together by tubing that extends from the first location to the second location;

activating a pump to circulate a cooling liquid through the reservoir and the heat radiator, the pump including a motor and **an impeller having curved blades**, the impeller being positioned in the reservoir; and

activating a fan to direct air through the heat radiator, the fan being operated by a motor separate from the motor of the pump.

18. The method of claim 17, wherein activating the pump includes circulating the cooling liquid between the upper and the lower chambers of the reservoir.

19. The method of claim 18, wherein circulating the cooling liquid between the upper and the lower chambers includes passing the cooling liquid from the upper chamber to the lower chamber through a single passageway of the one or more passageways.

‘362 Patent, Claims 17-19.

Asetek’s claimed invention has several notable features, including “an impeller having a plurality of curved blades” and a single-receptacle “reservoir including an upper and a lower chamber” contained within it which circulates cooling liquid to keep computer chips from overheating. *See id.* These limitations overcame prior art. Docket No. 387-3, Ex. 2 (U.S. Patent No. 7,971,632 file history) (adding “curved blades”); *see also Asetek Danmark A/S v. CMI USA Inc.*, 852 F.3d 1352, 1357–58 (Fed. Cir. 2017) (“[T]he jury found that the claimed liquid-cooling systems differ from the prior art . . . because the ‘reservoir’ is a ‘single receptacle that is divided into an upper chamber and a lower chamber.’”). The parties and this Court previously construed “chamber” as “compartment(s) within the reservoir” and “reservoir” as a “single receptacle defining a fluid flow path.” Docket No. 67 (Joint Claim Construction Statement) at 2-3; Docket

1 No. 237 at 3, Docket No. 258 (Claim Construction Order) at 5. Furthermore, the parties stipulated
 2 to the following:

- 3 1. The claimed “reservoir” in Asetek’s invention is a single
 4 receptacle that is divided into an upper chamber and a lower
 5 chamber, with the upper chamber providing the pumping function
 6 and the lower chamber providing the thermal exchange function.
- 7 2. Prior art devices included a pump, a single-chamber reservoir (as
 6 that term was used in the prior art), and a cold plate as separate
 7 components that were connected using tubing or attached together
 with clips or screws or permanently coupled.
- 8 3. Asetek’s patent claims are directed to a liquid cooling device
 9 comprising a dual chambered reservoir bounded by a heat -
 9 exchanging interface.

10 Docket No. 342 (Estoppel Joint Statement) at 2.

11 B. The CMI Case

12 Asetek previously asserted the ‘362 Patent (and related U.S. Patent No. 8,245,764) in an
 13 unrelated action against Cooler Master (“CMI”). *See Asetek Danmark A/S v. CMI USA, Inc.*, Case
 14 No. 4:13-cv-00457-JST (hereinafter the “CMI case”). Represented by the same counsel as in the
 15 current case, Asetek argued that the patents were not invalid over the prior art because the ‘362
 16 Patent’s “reservoir” limitation required a single receptacle while prior art Ryu disclosed two
 17 separate receptacles attached together. *See CMI USA Inc.*, 852 F.3d at 1357–58. The jury agreed
 18 with Asetek and found the ‘362 Patent valid over Ryu. *Asetek Danmark A/S v. CMI USA, Inc.*,
 19 No. 13-CV-00457-JST, 2015 WL 5568360, at *2 (N.D. Cal. Sept. 22, 2015), *aff’d in part,*
 20 *remanded in part*, 842 F.3d 1350 (Fed. Cir. 2016), *opinion modified and superseded on reh’g*, 852
 21 F.3d 1352 (Fed. Cir. 2017), *and aff’d in part, vacated in part*, 852 F.3d 1352 (Fed. Cir. 2017).
 22 The jury found the following key differences between the ‘362 Patent and the prior art:

23 Rather than connecting together multiple separate components (as in
 24 the prior art), Asetek’s patented pump head design combines, into a
 25 single unit, a pump and the claimed “reservoir” that has, among
 26 other things, dual chambers and is bounded by a removable cold
 27 plate. Also, the claimed “reservoir” in Asetek’s invention is a single
 receptacle that is divided into an upper chamber and a lower
 chamber, with the upper chamber providing the pumping function
 and the lower chamber providing the thermal exchange function.

28 *Id.* The Federal Circuit affirmed. *See CMI USA Inc.*, 852 F.3d at 1357–58.

1 Thereafter in a motion for contempt sanctions, Asetek argued that CMI's product with two
 2 separate and separable receptacles infringed the '362 Patent, claiming that the single receptacle
 3 reservoir argument was not the "crucial distinction" from the prior art. *See Asetek Danmark A/S v.*
 4 *CoolIT Sys. Inc.*, No. 19-CV-00410-EMC, 2022 WL 74160, at *4 (N.D. Cal. Jan. 7, 2022). Upon
 5 this attempt to argue that a device with multiple separable receptacles can satisfy the single
 6 receptacle reservoir limitation in the CMI case, CoolIT sought leave to amend answers to add
 7 collateral and judicial estoppel defenses in the current action. *Id.* This Court granted the
 8 amendment and noted that "should Asetek now argue in the instant case that a reservoir
 9 encompasses multiple receptacles like it did at the July 27, 2021 *CMI USA Inc.* hearing, this
 10 argument would appear to be inconsistent with its previous argument in *CMI USA Inc.* that a
 11 reservoir limitation requires a single receptacle." *Id.* at *9.

12 C. The '266, '330, and '284 Patents

13 Eleven claims across the '330, '284, and '266 Patents remain, each reciting or depending
 14 on an independent claim that recites a "plate" and a "plurality of [fins/walls]" defining a
 15 "corresponding plurality of microchannels":

16 13. A fluid heat exchanger for cooling an electronic device, the heat
 17 exchanger comprising:

18 a plurality of walls defining a corresponding plurality of
 19 **microchannels**, wherein each microchannel extends from a first end
 20 to a second end;

21 **a plate** overlying the walls; and

22 a seal, wherein the seal is a portion of the plate;

23 a fluid inlet passage configured to deliver a heat-exchange fluid
 24 through one aperture in the plate to each microchannel at a position
 25 between the corresponding first end and the corresponding second
 26 end of the respective microchannel;

27 a fluid outlet passage configured to receive the heat-exchange fluid
 28 from the first end and the second end of each microchannel, wherein
 29 the fluid outlet passage has a first outlet region positioned adjacent
 30 the microchannel first ends and a second outlet region positioned
 31 adjacent the microchannel second ends, wherein the seal separates
 32 the fluid inlet passage from the fluid outlet passage;

33 wherein a flow of the heat-exchange fluid through the one
 34 aperture in the plate bifurcates into two sub flows within

each microchannel, wherein the first outlet region receives one of the two sub flows adjacent the microchannel first ends and the second outlet region receives the other of the two sub flows adjacent the microchannel second ends, wherein the two sub flows recombine in the outlet passage.

15. The fluid heat exchanger according to claim 12, wherein the plurality of microchannels comprises at least two opposed outer microchannels and a centrally located microchannel positioned between the opposed outer microchannels, wherein the first outlet region comprises an outlet opening from each microchannel, wherein the outlet opening from the centrally located microchannel is larger than the outlet opening from at least one of the outer microchannels.

See, e.g., Docket No. 27-4 (the ‘266 Patent), claims 13, 15; Docket Nos. 27-1 (the ‘330 Patent); 27-2 (the ‘284 Patent).

On October 12, 2021, the PTAB issued a Final Written Decision (“FWD”) finding some of the asserted claims of CoolIT’s ‘266 Patent unpatentable and some of the asserted claims patentable. *See generally* Docket No. 394-5 (‘266 FWD). This decision came more than a month after close of fact discovery and after the parties exchanged initial expert reports on September 16, 2021. Representative claim 1, which was considered by the PTAB, read as follows:

1. A heat exchange system comprising:

a housing defining a recessed region and an outlet port fluidly coupled with the recessed region;

a heat sink having a plurality of juxtaposed fins defining a corresponding plurality of microchannels between adjacent fins;

a **manifold body** at least partially defining an opening overlying the microchannels,

wherein the **manifold body** defines a pair of compliant surfaces flanking the opening,

wherein the compliant surfaces urge against the fins, defining a flow boundary of the microchannels,

wherein the opening extends transversely relative to the fins and is configured to distribute a working fluid among the microchannels,

wherein the **manifold body** partially occupies the recessed region of the housing, leaving a pair of opposed portions of the recessed region unfilled, defining opposed exhaust manifold portions flanking the opening and being configured to receive the working fluid from the microchannels, and

wherein the housing further defines an outlet plenum configured to receive the working fluid from the exhaust manifold portions and to convey the working fluid to the outlet port.

¹‘266 Patent, claim 1. The PTAB found claims 1, 2, 4, 5, and 9 unpatentable and claims 13-15 not unpatentable. ‘266 FWD at 47.

III. LEGAL STANDARD

A. Federal Rules of Civil Procedure 26 and 37

Pursuant to Federal Rules of Civil Procedure 26(a)(2), an expert report must contain: “a complete statement of all opinions the witness will express and the basis and reasons for them” and “the facts or data considered by the witness in forming them.” Fed. R. Civ. P. 26(a)(2). Rule 26(e) imposes a duty to timely supplement disclosures made under Rule 26(a) that become incomplete or incorrect. *Sportspower Ltd. v. Crowntec Fitness Mfg. Ltd.*, No. 817-CV-02032-JLSKES, 2020 WL 7347860, at *2 (C.D. Cal. Nov. 18, 2020); Fed. R. Civ. P. 26(e). If a party fails to provide information as required under Rule 26, the improperly withheld information is excluded unless the failure was “substantially justified” or “harmless.” Fed. R. Civ. P. 37(c)(1); *Ingenco Holdings, LLC v. Ace Am. Ins. Co.*, 921 F.3d 803, 821 (9th Cir. 2019). A failure to comply with Rule 26(a)(2) is considered to be harmless when the party entitled to the expert disclosure has not been prejudiced.

Furthermore, Patent Local Rule 3 “requires patent disclosures early in a case and streamlines discovery by replacing the series of interrogatories that parties would likely have propounded without it.” *ASUS Computer Int'l v. Round Rock Rsch., LLC*, No. 12-CV-02099 JST (NC), 2014 WL 1463609, at *1 (N.D. Cal. Apr. 11, 2014) (internal quotation marks and modifications omitted). “Given the purpose of the Patent Local Rules, a party may not use an expert report to introduce new infringement theories, new infringing instrumentalities, new invalidity theories, or new prior art references not disclosed in the parties’ infringement contentions or invalidity contentions.” *Illumina, Inc. v. BGI Genomics Co.*, 559 F. Supp. 3d 1072, 1078 (N.D. Cal. 2021) (citations omitted). However, experts may discuss “the subject matter of their initial reports” and “any critiques of their opinions presented in the rebuttal reports, although they may not present new opinions, arguments, or evidence as *alternatives* to opinions, arguments,

1 or evidence. In other words, true rebuttal to criticism is permitted—facts and opinions that should
 2 have been in the original reports are not.” *Cave Consulting Grp., Inc. v. OptumInsight, Inc.*, No.
 3 15-CV-03424-JCS, 2018 WL 1938555, at *4 (N.D. Cal. Apr. 25, 2018).

4 B. *Daubert*

5 In assessing the admissibility of expert testimony under Federal Rule of Evidence 702,¹ a
 6 court must perform “a preliminary assessment of whether the reasoning or methodology
 7 underlying the testimony is scientifically valid and of whether that reasoning or methodology
 8 properly can be applied to the facts in issue.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579,
 9 592–93 (1993); *see also Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999) (*Daubert*
 10 standards apply to all expert testimony, not only scientific experts). Courts consider factors such
 11 as: whether the theory or technique can be or has been tested, whether the theory or technique has
 12 been subjected to peer review and publication, the known or potential rate of error with a scientific
 13 technique, and acceptance of the technique by a relevant scientific community. *Id.* at 593–94; *see*
 14 *also United States v. Hankey*, 203 F.3d 1160, 1167 (9th Cir. 2000). None of these factors is
 15 dispositive and, ultimately, “[t]he inquiry envisioned by Rule 702 is . . . a flexible one” which is
 16 focused “solely on principles and methodology, not on the conclusions that they generate.”
 17 *Daubert*, 509 U.S. at 594–95.

18 Under Rule 702 and *Daubert*, “[t]he duty falls squarely upon the district court to act as a
 19 gatekeeper to exclude junk science that does not meet Federal Rule of Evidence 702’s reliability
 20 standards.” *Est. of Barabin v. AstenJohnson, Inc.*, 740 F.3d 457, 463 (9th Cir. 2014), *overruled on*
 21 *other grounds by United States v. Bacon*, 979 F.3d 766 (9th Cir. 2020) (quotation and citation
 22 omitted). Moreover, “[t]he trial judge also has broad latitude in determining the appropriate form
 23 of the inquiry.” *Id.* The purpose of the gatekeeping role is to ensure that expert testimony is
 24 “properly grounded, well-reasoned and not speculative,” but it is not meant to substitute for

25
 26 ¹ A qualified expert may give opinion testimony if: (a) the expert's scientific, technical, or other
 27 specialized knowledge will help the trier of fact to understand the evidence or to determine a fact
 28 in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of
 reliable principles and methods; and (d) the expert has reliably applied the principles and methods
 to the facts of the case. Fed. R. Evid. 702.

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1 “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the
2 burden and proof [which] are the traditional and appropriate means of attacking shaky but
3 admissible evidence.” Fed. R. Evid. 702, Adv. Comm. Notes (2000) (quotation omitted). Thus,
4 “[a]fter an expert establishes admissibility to the judge's satisfaction, challenges that go to the
5 weight of the evidence are within the province of a fact finder, not a trial court judge.” *Pyramid*
6 *Techs., Inc. v. Hartford Cas. Ins. Co.*, 752 F.3d 807, 814 (9th Cir. 2014). Because the Court acts
7 as a gatekeeper and not a factfinder, an expert whose methodology is otherwise reliable should not
8 be excluded simply because the facts upon which his or her opinions are predicated are in dispute
9 unless those factual assumptions are “indisputably wrong.” *Guillory v. Domtar Indus. Inc.*, 95
10 F.3d 1320, 1331 (5th Cir. 1996); *see also* Fed. R. Evid. 702, Adv. Comm. Notes (2000)
11 (explaining that “[w]hen facts are in dispute, experts sometimes reach different conclusions” and a
12 trial court is not “authorize[d] … to exclude an expert's testimony on the ground that the court
13 believes one version of the facts and not the other”). The advisory committee notes for Rule 703
14 clarify the three possible sources of facts or data upon which expert opinions may be based on:

- 15 (1) “the firsthand observation of the witness with opinions based
16 thereon traditionally allowed . . .
- 17 (2) presentation at the trial [such as a] hypothetical question or
18 having the expert attend the trial and hear the testimony
establishing the facts and
- 19 (3) presentation of data to the expert outside of court and other than
by his own perception.”

20 Fed. R. Evid. 703, Adv. Comm. Notes; Fed. R. Evid. 702, Adv. Comm. Notes (2000) (Rule 702 is
21 “broad enough to allow an expert to rely on hypothetical facts that are supported by the
evidence.”).

22 “It traditionally falls upon cross-examination to negate the facts or factual assumptions
23 underlying an expert's opinion.” *In re MyFord Touch Consumer Litig.*, 291 F. Supp. 3d 936, 967
24 (N.D. Cal. 2018). Therefore, an expert opinion does not become fatally inadmissible just because
25 the expert assumed a certain set of facts as long as other evidence presented in the trial will
26 support the assumed fact. “Attention is directed to the validity of the techniques employed rather
27 than to relatively fruitless inquiries whether hearsay is involved.” *Id.* Such facts, data, or opinions
28 presented to the expert out of court, including hearsay, need not be admissible in evidence in order

1 for the opinion or inference to be admitted if it is of a type reasonably relied upon by experts in the
 2 field. Fed. R. Evid. 703.

3 IV. DISCUSSION

4 A. Motion for Judicial Estoppel (Docket No. 402) and Motion in Limine to Exclude Abraham
 5 Opinions (Docket No. 400)

6 Asetek's invention contains a "reservoir including an upper chamber and a lower
 7 chamber." '362 Patent, claim 17. The parties and this Court previously construed "chamber" as
 8 "compartment(s) *within* the reservoir" and "reservoir" as a "single receptacle defining a fluid flow
 9 path." *See* Docket Nos. 67, 104, 237, 258. Parties dispute whether CoolIT's upper and lower
 10 chambers in their accused products constitute two separable receptacles. If so, they do not
 11 infringe the '362 patent, which requires a single receptacle. *See* Docket No. 420 at 1-3.

12 According to Asetek, (1) the term "single receptacle" in the stipulated construction of
 13 "reservoir" does not preclude the presence of other smaller receptacles within the larger receptacle
 14 forming the claimed "reservoir" and (2) CoolIT's alleged second smaller receptacle within a larger
 15 receptacle is not actually a receptacle but a subcomponent of the reservoir. Docket No. 444-3 at 2.
 16 Therefore, Asetek contends that CoolIT's position that the accused products have two separable
 17 receptacles instead of one adds the following limitations beyond the parties' stipulation:

- 18 (1) the "single receptacle" must contain the two chambers
- 19 (2) the structure separating the two chambers is within the same
 single receptacle
- 20 (3) the two chambers do not have their own separate and separable
 enclosures and depend on the single receptacle to enclose them (in
 contrast to prior art Ryu and CoolIT's new design, of which the
 upper/pump chamber and the lower/thermal exchanger chamber
 have their own separate and separable boundary walls).

23 Docket No. 450 at 2-3 (citing Docket No. 400-5 ¶ 55).

24 The parties dispute whether CoolIT's and Dr. Abraham's arguments are (1) inconsistent
 25 with the argument CoolIT proffered at IPR and, therefore, judicially estopped, (2) inconsistent and
 26 narrower than the parties' stipulated claim construction, and (3) have an untenable result that
 27 excludes the '362 patent's own preferred embodiments. *See* Docket No. 400; Docket No. 402;
 28 Dockets No. 413, 420.

1 1. Judicial Estoppel

2 During the pendency of this action, the ‘354 and ‘355 patents were subject to IPR and were
 3 found unpatentable by the PTAB on August 19, 2021. Docket No. 380 at 3, n.2. In the IPR
 4 petitions, CoolIT argued that Asetek's patents were obvious because they relied on prior art
 5 references wherein the reservoir had multiple receptacles within the “single receptacle,” defined
 6 by multiple components in the reservoir. Docket No. 400 at 12; Docket No. 450 at 11. According
 7 to Asetek, CoolIT had argued that multiple components could constitute a single receptacle and
 8 reservoir related to the Duan, Batchelder, and Shin prior art. Docket No. 400-6 (Ex. D, CoolIT
 9 IPR Petition) at 26 (arguing that prior art discloses an accommodation chamber, cap, and cooling
 10 plate that “together form[ed] the claimed reservoir” and a “single receptacle defining a fluid flow
 11 path”); *see also* Docket No. 402-10 at 12-14; Docket No. 444-3 at 12. These multiple components
 12 that likely can hold liquid (and thus is a receptacle under CoolIT’s current interpretation) “serve as
 13 a single receptacle defining a fluid flow path.” *See* Docket No. 400 at 12; Docket No. 444-3 at 11.
 14 As such, Asetek argues that judicial estoppel prohibits CoolIT and Dr. Abraham from taking the
 15 inconsistent position that multiple components or receptacles cannot be connected or integrated
 16 together with the claimed “reservoir.” *See generally* Docket No. 400; *see also* Docket No. 450-5
 17 (Abraham Infringement Rebuttal Report) at ¶¶ 85-87 (opining that the manifold groove in the
 18 copper cold plate in the lower chamber of the accused device is “capable of holding coolant” and
 19 thus constitutes a separate receptacle).

20 As discussed separately for the parties’ motion for summary judgment, CoolIT’s prior
 21 position at IPR is not inconsistent with its current position because the fact that multiple
 22 *components* can form the “reservoir” or a “single receptacle” is irrelevant to the question of
 23 whether multiple chambers can be considered each a separate *receptacle* within the reservoir. As
 24 such, the Court **DENIES** Asetek’s judicial estoppel arguments for both motions.

25 2. Claim Construction

26 Dr. Abraham opines that the accused H100i product contains a collection manifold in the
 27 heat exchanging interface (i.e., the copper cold plate), which constitutes a separate receptacle
 28

under the word's plain and ordinary meaning because it can receive and contain liquid.² Docket No. 420-4 at 49-54; Docket No. 400 at 6, 8. Asetek argues that CoolIT's logic that the accused products constitute two separable receptacles creates new limitations that cannot be added to the stipulated construction. Asetek also argues that Dr. Abraham essentially argues claim construction to the jury to explain "what 'a single receptacle that is divided into two chambers' actually means" using extrinsic attorney annotations that Dr. Abraham did not inspect or verify. Docket No. 400 at 6; Docket No. 450 at 2-3 (*Huawei Techs., Co, Ltd v. Samsung Elecs. Co, Ltd.*, 340 F. Supp. 3d 934, 967 (N.D. Cal. 2018) (citing *Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK, 2014 WL 660857, at *6 (N.D. Cal. Feb. 20, 2014) ("Expert opinions should be excluded when they "exceed the bounds' of the plain and ordinary meaning of the claim terms" and "delv[e] too deeply into claim construction to be presented to the jury[.]").)).

First, Dr. Abraham does not attempt to advance a claim construction argument by explaining to the jury "what 'a single receptacle that is divided into two chambers' actually means." Docket No. 400 at 7-8. In fact, "[t]he implications of the Court's constructions are matters on which the parties' experts may opine" and "evidence regarding the plain and ordinary meaning of claim terms is not necessarily inadmissible at trial." *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 763 F. Supp. 2d 671, 695 (D. Del. 2010); *Fujifilm Corp. v. Motorola Mobility LLC*, No. 12-CV-03587-WHO, 2015 WL 1265009, at *5 (N.D. Cal. Mar. 19, 2015). Indeed, rather than proposing a new technical significance to "reservoir," Dr. Abraham attempts to apply the stipulated construction of "single receptacle" and the patent's requirement of a reservoir with two chambers through their plain meanings.

Asetek also argues that, by characterizing the collection manifold in the copper cold plate as a separate receptacle, Dr. Abraham's construction of "reservoir" is inconsistent and narrower than the bounds of this court's claim construction. Docket No. 400 at 4, 6-8 (quoting *EMC Corp. v. Pure Storage, Inc.*, 154 F. Supp. 3d 81, 109 (D. Del. 2016) (citations omitted) ("As expert testimony inconsistent with the Court's claim construction is unreliable and unhelpful to the finder

² Dr. Abraham notes that receptacle means "one that receives and contains something" under the Merriam-Webster Dictionary. Docket No. 420 at 4.

1 of fact,’ it should be excluded under the *Daubert* standard.”); *see also Exergen Corp. v. Wal-Mart*

2 Stores, Inc., 575 F.3d 1312, 1321 (Fed. Cir. 2009) (reversing jury finding of infringement in part

3 based on a statement to jury inconsistent with claim construction and holding that “[n]o party may

4 contradict the court’s construction to a jury”). Furthermore, Asetek argues that Dr. Abraham

5 applies a narrow construction of the term “reservoir” based on annotated screenshots of a Seidon

6 120V product from a different Asetek trial that he did not prepare, verify, or physically inspect.

7 Docket No. 400 4-7 (citing Ex. C ¶¶ 53-55). In doing so, he introduced limitations such that “the

8 structure separating the two chambers is within the same single receptacle and divides such single

9 receptacle from within and into the two chambers within it” and that the “two chambers do not

10 have their own separate and separable [sic] enclosures . . . they depend on the single receptacle to

11 enclose them.” *Id.*

12 CoolIT responds that it has a consistent position (derived from the jury verdict in the CMI

13 case) that the reservoir claimed in Asetek’s patent is a single receptacle that is divided into an

14 upper chamber and lower chamber and is not infringed because CoolIT’s products have two

15 separable receptacles. Docket No. 420 at 3. CoolIT again argues that Dr. Abraham merely applies

16 the stipulated constructions to the stipulated facts. *See* Docket No. 420 at 11. Asetek’s

17 infringement theory requires that the lower chamber provide the thermal exchange function under

18 the parties’ stipulation, and liquid is required for the thermal exchange function. Docket No. 342

19 at 2. Therefore, CoolIT argues that Asetek’s theory requires that the copper plate device contain

20 liquid to satisfy this function. Docket No. 420 at 6-7; Docket No. 420-4 at 49-54.

21 Asetek disputes CoolIT’s statement that “there is virtually no space within [the lower

22 chamber of the H100i] . . . to provide the required thermal exchange function” because the

23 H100i’s lower chamber extends above the cold plate and includes the plastic cavity. Docket No.

24 450 at 4. According to Asetek, the cold plate in the accused H100i device is not the only portion

25 of the lower chamber that contains volume/fluid and contributes to the thermal exchange function

26 of the lower chamber. *Id.* at 3. Asetek argues that the volume in the lower chamber in the H100i

27 is not just volume in the copper cold plate, but also includes the volume in the plastic housing

28 structure above the cold plate. *Id.* at 4, 6 (citing Docket No. 400-5 (Ex. C, Dr. Abraham Rebuttal

1 Report) ¶ 92 (referring to the copper cold plate/“heat exchanging interface” as only “part of the
2 lower chamber”); Docket No. 386-5 (Ex. 7, Dr. Tuckerman Report) ¶ 58, ¶ 275, ¶ 282). Asetek
3 also points out that Dr. Tuckerman testified that the “lower chamber” is not just the copper cold
4 plate but includes other components above it. *Id.* at 7 (figure depicting multiple components of
5 the lower chamber, not just the heat exchanging interface). Asetek also argues that CoolIT’s use
6 of the word “virtually no volume” in the H100i lower chamber other than in copper cold plate is a
7 tacit admission that there is, in fact, additional volume. *Id.* at 5. Furthermore, Asetek points out
8 that CoolIT’s photos show grooves and spaces in the plastic portion of the lower chamber that
9 lines up with the structure of the cold plate such that when the unit (the plastic portion and the cold
10 plate) are assembled together, they form the interior of the lower chamber. *Id.*



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19 *Id.* (black plastic housing portion and the copper plate).

20 Asetek is correct; Dr. Tuckerman never stated that the cold plate is the *only* portion of the
21 lower chamber that contains fluid. *See* Docket No. 386-5 (Ex. 7, Dr. Tuckerman Report).
22 Likewise, although Dr. Abraham identified the copper component for the fluid flow function, he
23 did not identify it as the *only* portion with this function. *See* Docket No. 400-5 (Ex. C, Dr.
24 Abraham Rebuttal Report). Therefore, while Dr. Abraham and Dr. Tuckerman identified other
25 components in the lower chamber above the cold plate, they did not specify that these other
26 components could not contain liquid.

27 Nevertheless, CoolIT’s argument is not inconsistent with the parties’ and the Court’s
28 construction of a “reservoir.” *See Tesco Corp. v. Weatherford Int’l Inc.*, 750 F. Supp. 2d 780, 796

1 (S.D. Tex. 2010) (merely presenting one interpretation of how the construction applies to the
 2 accused products is permissible); *Arctic Cat Inc. v. Bombardier Recreational Prod., Inc.*, No. 14-
 3 CV-62369, 2016 WL 9402395, at *7 (S.D. Fla. May 3, 2016), *vacated in part on other grounds*,
 4 876 F.3d 1350 (Fed. Cir. 2017) (“Although it is improper to ignore the Court’s constructions or to
 5 utilize inconsistent constructions, it is appropriate for an expert to apply the Court’s constructions,
 6 . . . A dispute about the proper *application* of the Court’s constructions is not grounds to exclude
 7 [the expert’s] opinions.”); *Personalized User Model, L.L.P. v. Google Inc.*, No. CV 09-525-LPS,
 8 2014 WL 807736, at *1–2 (D. Del. Feb. 27, 2014) (contrasting testimony clearly contradicting an
 9 aspect of the claim language that the court had explicitly ruled upon in claim construction with
 10 testimony applying the court’s construction to the accused products, which was a factual dispute).
 11 It is the “single receptacle” in the ‘362 patent that must contain the two chambers, as a “reservoir”
 12 is a “single receptacle” containing an upper and a lower chamber, and a chamber is required to be
 13 within the reservoir. *See* Docket Nos. 67, 104, 237, 258. Nothing in CoolIT’s theory contradicts
 14 or narrows the requirement that the upper and lower chambers are both within the “single
 15 receptacle” that is also the “reservoir.” And Dr. Abraham’s reference to the Seidon 120V is
 16 merely used as an example to illustrate his theory rather than introduce new limitations. As such,
 17 Asetek’s argument fails.

18 3. The Nesting Doll Analogy

19 Asetek also argues that Dr. Abraham’s interpretation of the reservoir was rejected by Judge
 20 Tigar in another case. Docket No. 400 at 9-10. In the CMI case, CMI argued that prior art Ryu
 21 (containing two spatially separable receptacles joined together) rendered Asetek’s claims obvious
 22 and that the accused products’ sub-chamber within the lower chamber was a receptacle.
 23 Therefore, according to CMI, the ‘362 was invalid, and the accused product did not infringe
 24 because there was more than one receptacle within the reservoir. The jury found for Asetek on the
 25 invalidity issue, reasoning that the ‘362 patent “differ[ed] from the prior art because they
 26 combine[d] a “pump” and a “reservoir” “into a single unit” and because the “reservoir” is a ‘single
 27 receptacle that is divided into an upper chamber and a lower chamber.’” *CMI USA Inc.*, 852 F.3d
 28 at 1357–58. In a subsequent motion for sanctions, CMI sought to raise judicial estoppel; however,

1 Judge Tigar found that Asetek did not take a “clearly inconsistent” position with any position it
 2 took at trial. CMI case, Docket No. 426 at 6. In doing so, he made the following nesting doll
 3 analogy:

4 “[I]t could be that even if the copper subchamber is a receptacle, that
 5 would not change the fact that the reservoir is a single receptacle
 6 divided into an upper chamber and lower chamber – the lower
 7 chamber would merely include or consist entirely of a smaller
 receptacle or sub-chamber. For example, nesting dolls contain many
 receptacles. But the smaller dolls – or receptacles – do not affect
 whether the biggest doll is a ‘single receptacle’.”

8 CMI case, Docket No. 426 at 6. Asetek uses this analogy to argue that the smaller receptacles do
 9 not affect the overall single receptacle, and therefore, Dr. Abraham’s interpretation that a “single
 10 receptacle” must have only one receptacle within it fails.³ Docket No. 400 at 9-10.

11 Asetek’s argument fails. Judge Tigar merely found that Asetek’s argument was not
 12 “clearly inconsistent” and raised the nesting doll theory only as an example. *See* CMI case,
 13 Docket No. 426 at 6. Furthermore, CoolIT’s theory does not clearly map to Judge Tigar’s nesting
 14 doll analogy because it argues that the smaller receptacles are not completely contained within the
 15 larger receptacle, unlike a nesting doll. Docket No. 420 at 15-16. Whether the nesting doll
 16 analogy may apply and whether it is appropriate to the facts of this case is a question of fact,
 17 which fails for reasons discussed separately.

18 For the foregoing reasons, CoolIT’s argument is not contrary to or narrower than the
 19 parties’ stipulated claim construction.

20 4. “Comprising” Language

21 Asetek also unconvincingly argues that CoolIT’s and Dr. Abraham’s opinion that the
 22 Tamriel has two receptacles fails because the word “comprising” is open-ended and must allow for
 23 additional, unrecited elements (including additional receptacles) within an infringing device. *See*
 24 Docket No. 400 at 9; Docket No. 444-3 at 7 (citing *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495,

25
 26 ³ Previously, CoolIT had asked this Court leave to assert the defenses of collateral and judicial
 27 estoppel after learning of Asetek’s inconsistent positions made during a hearing on Asetek’s
 motion for contempt sanctions in CMI. *Asetek Danmark A/S v. CoolIT Sys. Inc.*, No. 19-CV-
 00410-EMC, 2022 WL 74160, at *1-*2 (N.D. Cal. Jan. 7, 2022). The Court granted CoolIT’s
 motion, and barred Asetek from arguing that a reservoir encompasses multiple receptacles. *Id.*
 Now, Asetek disputes CoolIT’s attempt to take an inconsistent position.

1 501 (Fed. Cir. 1997); *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1371–73 (Fed. Cir.
 2 2005)). However, to read “single” as “one or more” in an open-ended “comprising” patent would
 3 render the claimed singularity of the receptacle meaningless. The Federal Circuit has previously
 4 explained that:

5 [A]n indefinite article ‘a’ or ‘an’ in patent parlance carries the
 6 meaning of “one or more” in open-ended claims containing the
 7 transitional phrase ‘comprising’ . . . [and] [u]nless the claim is
 specific as to the number of elements, the article “a” receives a
 singular interpretation only in rare circumstances when the patentee
 evinces a clear intent to so limit the article.
 8

9 *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000). Here, Asetek’s
 10 argument fails because the claim is specific as to the number of elements. Therefore, the word
 11 “comprising” would not, by itself, allow additional receptacles.

12 5. Preferred Embodiments

13 Lastly, Asetek argues that defining “reservoir” to preclude smaller receptacles within it
 14 would exclude an analogous preferred embodiment of the ‘196 patent with internal components
 15 (such as an impeller cover and heat-exchanging interface) that would constitute smaller
 16 receptacles under Dr. Abraham’s analysis. Docket No. 444-3 at 9-10; No. 400 at 11. The relevant
 17 preferred embodiment describes that an impeller cover is separable from the reservoir housing, is
 18 capable of holding or accommodating coolant, and defines a pump chamber. *Id.* As such, the
 19 preferred embodiment cannot practice the claimed invention. Docket No. 400 at 11 (citing *Accent*
 20 *Packaging, Inc. v. Leggett & Platt, Inc.*, 707 F.3d 1318, 1326 (Fed. Cir. 2013) (“[A] claim
 21 interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever,
 22 correct.”); *accord Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1305 (Fed. Cir.
 23 2007)). Asetek argues that the stipulated construction of “reservoir” applies equally to the ‘362,
 24 ‘196, and ‘601 patents. Docket No. 444-3 at 10.

25 Although Asetek cites cases that generally state that claim interpretation cannot exclude a
 26 preferred embodiment and argues that the stipulated construction of “reservoir” applies to both the
 27 ‘362 and ‘196 patents, it has not cited any authority that would allow the Court to consider the
 28 preferred embodiments in a different patent in determining the issues of the ‘362 patent. Thus,

1 this argument fails.

2 For the foregoing reasons, the Court **DENIES** Asetek's motion to exclude Dr. Abraham's
3 opinions.

4 **B. Motion to Exclude Dr. Stein's Report (Docket No. 399)**

5 One of the issues in this action is whether CoolIT's products, which have straight blades,
6 infringe the '362 patent, which requires "curved blades." Asetek relies on Dr. Stein's simulation
7 results to support its DOE theory against CoolIT devices: that the impeller blades in the accused
8 CoolIT products are substantially equivalent to an impeller with curved blades. In simulating the
9 performance and behavior of CoolIT's blades compared to curved blades and straight blades, Dr.
10 Stein did not test the blades in CoolIT's system but in a "generic" pump "to make sure that [he]
11 can evaluate the differences and similarities between the different blades." Docket No. 425 at 7.
12 CoolIT asks the Court to exclude Dr. Stein's report as irrelevant and unreliable. Because the
13 Court does not reach the DOE issue, this motion is dismissed as **MOOT**.

14 **C. Motion to Exclude Tuckerman Opinions (Docket No. 397)**

15 CoolIT seeks to exclude Dr. David B. Tuckerman's opinions for various reasons set forth
16 below.

17 **1. Whether Dr. Tuckerman Wrote His Report**

18 Rule 26 requires that an expert report be prepared and signed by the witness. Fed. R. Civ.
19 P. 26. However, an attorney may assist the expert in drafting the report:

20 Rule 26(a)(2)(B) does not preclude counsel from providing
21 assistance to experts in preparing the reports, and indeed, with
22 experts such as automobile mechanics, this assistance may be
23 needed. Nevertheless, the report, which is intended to set forth the
substance of the direct examination, should be written in a manner
that reflects the testimony to be given by the witness and it must be
signed by the witness.

24 Fed. R. Civ. P. 26 Adv. Comm. Note (1993); *see also NetFuel, Inc. v. Cisco Sys. Inc.*, No. 5:18-
25 CV-02352-EJD, 2020 WL 1274985, at *3 (N.D. Cal. Mar. 17, 2020). "[C]ounsel's composing of
26 initial drafts of reports based upon communications with the expert and allowing the expert to
27 substantively revise the report to reflect the expert's opinions, or counsel's drafting of the report
28 with the expert's substantive assistance' are permissible and do not warrant striking of the report."

1 *Accentra Inc. v. Staples, Inc.*, No. CV 07-5862 ABC (RZX), 2010 WL 11459205, at *4 (C.D. Cal.
 2 Oct. 7, 2010); *see also Seitz v. Envirotech Sys. Worldwide Inc.*, No. CIV. A. H-02-4782, 2008 WL
 3 656513, at *2–3 (S.D. Tex. Mar. 6, 2008).

4 CoolIT argues that Dr. Tuckerman’s opinion should be stricken in its entirety because the
 5 totality of the circumstances suggests that he may not have prepared his report as required by Rule
 6 26. CoolIT points to the following facts to support its argument: (1) the first draft of the report
 7 was written by Asetek, (2) Dr. Tuckerman did not identify his own obviousness grounds, (3) Dr.
 8 Tuckerman’s lack of familiarity and confusion regarding his report, (4) long response times (five
 9 to ten minutes) in answering simple questions and merely reading his report into the record in
 10 response to questions, and (5) the fact that the claim chart attached to his report recycles annotated
 11 pictures from the declaration of Asetek’s former expert, Dr. Tilton, and (6) Dr. Tuckerman’s lack
 12 of awareness that paragraphs 48 and 50 of his report were virtually verbatim copies of Dr. Tilton’s
 13 declaration.⁴ Docket No. 397 at 14, n.11. Therefore, CoolIT argues that the expert report must be
 14 excluded under *Numantics* because it was not written by Dr. Tuckerman. Docket No. 443 at 10;
 15 Docket No. 397 at 15 (citing *Numatics, Inc. v. Balluff, Inc.*, 66 F. Supp. 3d 934, 943, 45 (E.D.
 16 Mich. 2014) (“Where an expert merely offers his client’s opinion as his own, that opinion may be
 17 excluded.” “[The expert’s] complete lack of knowledge about the factors relevant to assessing
 18 obviousness undermines [CoolIT’s] assertion that [the expert’s] conclusions are his own.”)).

19 However, *Numatics* is inapposite. The expert in *Numatics* adopted in entirety a report that
 20 was written by counsel and only made “fairly minor” changes to it, even acknowledging that
 21 “[h]ad he drafted the report, . . . it would not have consumed sixty-five pages [but had] boiled [it]
 22 down to five pages after removing the legalness out of it.” *Numatics*, 66 F. Supp. 3d at 944
 23 (quotation marks omitted). In contrast, Dr. Tuckerman states that he made “a lot of changes” to
 24 his report. The fact that Asetek wrote Dr. Tuckerman’s report does not bar the expert report under
 25 Rule 26 as long as there was substantial involvement by the expert. The *Accentra* court explained:

26 Rule 26 . . . contemplates “**some attorney involvement** in the
 27 preparation of any expert report,” but “the expert must also

28 ⁴ Asetek fails to provide support for Dr. Tuckerman’s lack of awareness.

1 substantially participate in the preparation of his report.” This
 2 involvement can include counsel’s paraphrasing of the expert’s
 3 qualifications, counsel’s providing “teamwork,” “collaboration,” or
 4 editorial assistance on the report, **counsel’s composing of initial
 drafts of reports based upon communications with the expert
 and allowing the expert to substantively revise the report to
 reflect the expert’s opinions, or counsel’s drafting of the report
 with the expert’s substantive assistance[.]**

5 **In Seitz, for example, attorneys created the initial drafts of
 6 expert reports based upon the expert’s substantive opinions
 7 communicated to counsel and, after the initial drafts were created
 8 by counsel, the expert revised them by adding, deleting, and
 9 modifying content.** Similarly, in *Crowley*, an attorney prepared
 10 an expert report based upon “substantial input” from the expert
 11 based on meetings the attorney had with the expert, which was
 12 permitted because Rule 26 does not “require that the expert be
 13 the person who actually puts pen to paper (or fingers to
 14 keyboard).”

15 An attorney cannot, however, simply draft the report without prior
 16 substantive input from an expert and ask the expert to approve and
 17 sign the report because that “would read the word ‘prepared’
 18 completely out of the rule.” Thus, an expert cannot simply
 19 “peruse[e] the work product” of someone else and sign the bottom of
 20 the report because doing so creates “very little, if any, evidentiary
 21 value” in the expert’s testimony. In *Weitz*, the expert report was
 22 excluded because the expert’s assistant conducted the underlying
 23 research and created the expert report, and only afterward did the
 24 expert sign the report without changing any part of the report. *Id.*

25 *Accentra*, 2010 WL 11459205, at *4 (citations omitted); *see also Icon-IP Pty Ltd. v. Specialized
 26 Bicycle Components, Inc.*, 87 F. Supp. 3d 928, 949–50 (N.D. Cal. 2015) (declining to strike expert
 27 report even though counsel typed the report because the expert testified that the information in the
 28 report came from him)).

29 Although CoolIT’s counsel created the initial draft, Dr. Tuckerman was involved in the
 30 expert report both prior to the first draft and significantly afterward, as he testified that “there was
 31 back and forth before . . . the first draft and lots of back and forth after the first draft” and that
 32 Asetek “created the report under [his] guidance.” Docket No. 397-4 (Ex. 3, 12/22/21 Tuckerman
 33 Depo.) at 15:16-21; Docket No. 397-3 (Ex. 2, 12/20/21 Tuckerman Depo.) 146:23-147:6. Dr.
 34 Tuckerman also provided the following testimony:

35 Q: You wrote it; right?

36 A: I did.
 37 . . .

1 [Asetek] wrote the first draft and I reviewed it very carefully . . .
 2 [B]ecause some of this is . . . legalese in terms of how things are
 3 said, and there are certain organizational ways. So I'm not highly
 4 knowledgeable on how these reports are to be organized and what's
 5 the best way to display information.
 6

7 So [Asetek] wrote the draft, I read it very carefully. I had numerous
 8 teleconferences with [Asetek]. . . . I gave changes that I requested
 9 either for clarity or for - - certainly for technical accuracy. And
 10 [Asetek] would make those changes and . . . we'd go back and forth.
 11 And so over a period of a few months, the report came together[.]
 12 . . .

13 I can't say that every single word was chosen by me, but I
 14 absolutely agreed with the final product, every word in the final
 15 product.

16 Docket No. 397-3 (Ex. 2, 12/20/21 Tuckerman Depo.) at 144:14-145:17; *see also* Docket No. 397-
 17 4 (Ex. 3, 12/22/21 Tuckerman Depo.) at 15:1-10).

18 To the point that Dr. Tuckerman did not identify his own obviousness grounds⁵, CoolIT
 19 fails to cite any cases stating that an expert is required to select the prior art for his expert report.
 20 Dr. Tuckerman also testified that he agreed that they would be legitimate prior art. Docket No.
 21 397-3 (Ex. 2, 12/20/21 Tuckerman Depo.) at 167:22-169:18.

22 CoolIT seems to put great weight on the fact that Dr. Tuckerman conflates an expert
 23 declaration with the PTAB's FWD decision. However, this issue seems to stem from Dr.
 24 Tuckerman's confusion regarding the legality and significance of the document. During his
 25 deposition, he had difficulty remembering all the contents of the materials and was confused about
 26 the significance of the counsel's question. Docket No. 397-3 (Ex. 2) at 20:15-21:18 ("I need a
 27 couple minutes to refresh my memory . . . I saw a great many documents since this case began . . .
 28 I think this is a - - perhaps a legal technicality question - - whether this exhibit was incorporated in
 the PTAB's final written decision. I don't know whether it would be considered as such or not.").

Finally, CoolIT points out that a chart attached to Dr. Tuckerman's report includes Dr. Tilton's annotated pictures (from the invalidity claim chart) only with different colors and wording and that two paragraphs were "virtually verbatim copies of Dr. Tilton's declaration." However, Dr. Tuckerman did not merely copy and paste the annotated pictures from the invalidity claim

⁵ Dr. Tuckerman was not involved in selecting the initial list of prior art for the invalidity contentions because he replaced another expert in the case.

1 – he made changes to the annotations to clarify their meaning. For example, he renames “the
 2 plate” to “flow distributor,” clarifies that “walls” are “microfins,” and combines different pictures
 3 in different parts of his report. *Compare* Docket No. 397-15 (Ex. 14, Dr. Tuckerman’s Expert
 4 Report) Chart III, at 1, 2, 3, 6 *with* Docket No. 397-16 (Ex. 15 Dr. Tilton’s Expert Declaration in
 5 IPR2020-00825) at 103, 104, 105, 117.

6 As for the two paragraphs that were copies of Dr. Tilton’s declaration, Dr. Tuckerman
 7 testified:

8 A: . . . [W]hen something is true and correct and technically correct,
 9 you know, I don’t feel the need to change around the words. You
 10 know, if I was publishing a paper, you know, then issues of
 11 permission might be relevant. But when I’m just stating a truth --
 12 and let me be very clear, I’m not relying on Dr. Tilton’s opinions. I
 13 think Dr. Tilton is correct, but these are – these are exactly my own
 14 opinion on the subject because they’re manifestly and obviously true
 15 physical facts . . .

16 Ex. 3 at 29:7-31:17 (emphasis added; objections omitted).

17 CoolIT cites a case that excluded an expert witness’s testimony because “undeniable
 18 substantial similarities between [the expert’s] report and the report of another expert prepared with
 19 assistance from the same counsel in an unrelated case, demonstrate that counsel’s participation so
 20 exceeded the bounds of legitimate ‘assistance’ as to negate the possibility that [the expert] actually
 21 prepared his own report[.]” *In re Jackson Nat. Life Ins. Co. Premium Litig.*, No. 96-MD-1122,
 22 2000 WL 33654070, at *1 (W.D. Mich. Feb. 8, 2000); *Numatics*, 66 F. Supp. 3d at 943. However,
 23 two paragraphs within two reports totaling 200 pages in length do not “demonstrate that counsel’s
 24 participation so exceeded the bounds of legitimate ‘assistance’ as to negate the possibility that [Dr.
 25 Tuckerman] actually prepared his own report within the meaning of Rule 26(a)(2).” *Id.* Mere
 26 failure to properly cite the source of the contents in these paragraphs does not suggest that his
 27 expert report as a whole is not his own. As such, CoolIT’s attempt to exclude Dr. Tuckerman’s
 28 opinion in its entirety is unconvincing.

29 2. Dr. Tuckerman’s Opinion on Non-Infringing Alternatives

30 Dr. Tuckerman opines that Asetek’s Gen 3 and Cooler Master products are acceptable non-
 31 infringing alternatives. According to CoolIT, this opinion fails because he admitted at deposition

1 that he was “[n]ot at all” familiar with the Asetek Gen 3 product and that he never inspected or
 2 conducted performance testing on the Cooler Master product. Docket No. 397 at 16 (citing
 3 Docket No. 397-4 (Ex. 3 12/22/21 Tuckerman Depo.) at 79:22-80:6; Docket No. 397-6 (Ex. 5
 4 3/18/22 Tuckerman Depo.) at 67:2-11). As such, Dr. Tuckerman has no independent basis for
 5 assessing whether the thermal performance of these products would be acceptable to Asetek
 6 customers, let alone that these products do not infringe the Asserted CoolIT Patents. *Id.* at 17
 7 (citing *Acceleration Bay LLC v. Activision Blizzard Inc.*, No. 1:16-CV-00453-RGA, 2019 WL
 8 4194060, at *8 (D. Del. Sept. 4, 2019) (“It is undisputed that none of its technical experts have
 9 opined that the earlier games are non-infringing. Thus, the only support for the conclusion that the
 10 earlier versions of the games are non-infringing alternative is [the expert’s] assumption.”)).
 11 Asetek responds that Dr. Tuckerman did not have to inspect these products to opine on them
 12 because he relied on Asetek’s and CoolIT’s documents and CoolIT’s own expert opinions.
 13 Docket No. 422 at 17.

14 Regarding the acceptability of the Gen 3 product, Asetek’s statement that it will “have the
 15 CEO of Asetek, Andre Eriksen, testify about [the acceptability of a non-split glow design similar
 16 to the Gen 3] (not Dr. Tuckerman)” is insufficient. Docket No. 422 at 18. Furthermore, Dr.
 17 Tuckerman’s single source (Dr. Abraham’s admission that the Asetek Gen 3 has non-split flow
 18 designs) is not disclosed in the “Materials Considered” list of Dr. Tuckerman’s report. Docket
 19 No. 443 at 9. Asetek’s attempt to push the acceptability issue to Mr. Eriksen and Dr. Abraham
 20 fails because he cannot simply delegate to another his opinion on whether the noninfringing
 21 alternative would be acceptable to the customers.

22 Regarding the acceptability of the Cooler Master product, Dr. Tuckerman relies on
 23 CoolIT’s competitive analysis, which states that Cooler Master is a competitor to CoolIT and
 24 Asetek with superior performance to that of CoolIT’s split flow design and acceptable to
 25 customers. Docket No. 422 at 19 (“[Cooler Master’s] ‘thermal resistance . . . is better than the
 26 comparable [CoolIT product] . . . [Cooler Master] is a meaningful competitor to Asetek and
 27 CoolIT/Corsair’s desktop liquid cooling products.’ It is, therefore, reasonable to infer that the
 28 thermal performance of the non-split flow Cooler Master product is acceptable to customers of

1 desktop liquid cooling products.” (citing Docket No. 395-6, ¶ 84)); *see also* Ex. C at 71:6-72:17
 2 (CoolIT document stating that there “is a nonsplit-flow design that is performing comparable to
 3 other split-flow designs, and given that, [] it would seem to be a perfectly acceptable option for
 4 customers.”)). Dr. Tuckerman’s reliance on CoolIT’s and Asetek’s documents and counsel for the
 5 fact that the Cooler Master product does not have split flow designs is not improper, as experts
 6 may rely on factual representations by the parties.⁶ However, although CoolIT’s competitive
 7 analysis identifies Cooler Master as a competitor with thermal performance superior to that of
 8 CoolIT’s split flow design, the mere fact that thermal performance is superior does not, by itself,
 9 answer the question of acceptability to Asetek customers.⁷ *See* Docket No. 422; *Webasto Thermo*
 10 & *Comfort N. Am., Inc. v. BesTop, Inc.*, No. 16-CV-13456, 2019 WL 3334563, at *6 (E.D. Mich.
 11 July 25, 2019) (“any opinion that the proposed design would provide all the same benefits of the
 12 [patent] and would be an acceptable alternative to consumers would involve explaining to a jury
 13 what consumers valued in the [patent] and why and how the alleged proposed alternative design-
 14 around satisfied those customer preferences and demands”). That the Cooler Master product is a
 15 “meaningful competitor” merely because “they are going after the same market” also does not
 16 answer the question of acceptability to Asetek customers. Docket No. 422 at 19. As such, Dr.
 17 Tuckerman’s opinion lacks a basis sufficient to satisfy *Daubert*.

18 For the foregoing reasons, the Court **GRANTS** CoolIT’s motion to exclude Dr.
 19 Tuckerman’s opinions regarding noninfringing alternatives.

20 3. Dr. Tuckerman’s Opinions on Impeller Blades

21 The ‘362 patent claims an impeller having curved blades. Docket No. 397 at 17. CoolIT
 22 ask the Court to exclude Dr. Tuckerman’s opinions regarding the impeller blades because he (1)
 23

24 ⁶ For the noninfringement issue, Asetek points out that a non-split flow design is undisputedly a
 25 noninfringing design around, that CoolIT’s own expert admitted that the Asetek Gen 3 has non-
 26 split flow designs, and that CoolIT’s own analysis and witness states that the Cooler Master
 27 product has non-split flow designs and therefore do not infringe. Docket No. 422 at 18 (citing Ex.
 28 E, F, G).

7 CoolIT points out that the document Dr. Tuckerman relies on actually shows that the Cooler
 Master product has worse performance than Asetek’s Gen 7 product. But this is not a question of
 admissibility.

1 conflates “curved” blades with “non-radial” blades that include non-curved blades and (2) his
 2 multiple definitions of “radial” blades are unreliable. Because the Court does not reach the DOE
 3 issue, this motion is dismissed as **MOOT**.

4 4. Dr. Tuckerman’s Opinions on Microchannels

5 Parties dispute the measured distance between the adjacent fins of the *Antarctica* prior art
 6 to argue whether *Antarctica* has “microchannels” that are required to be less than 1mm. Dr.
 7 Pokharna’s invalidity rebuttal report provides his methodology (*i.e.*, using electronic vernier
 8 calipers) and data showing that the *Antarctica* sample’s channel widths exceed 1.0mm. Docket
 9 No. 389-5 (Ex. 4, Pokharna Reb. Rep.) ¶¶ 72-74. On the other hand, Dr. Tuckerman argues that
 10 the adjacent fins are spaced about 0.9–1.0mm apart but does not disclose his methodology in his
 11 report. Docket No. 397-2 (Ex. 1, Tuckerman Rep.) ¶ 57. In the report, Dr. Tuckerman simply
 12 states that he relied both on his personal measurements and the testimony of Mr. Eriksen. *Id.*;
 13 Docket No. 443 at 3. It was later in his depositions on December 20, 2021 that Dr. Tuckerman
 14 discussed his methodology, that the channel width was measured using calipers at the base of the
 15 microchannels as follows:

16 I used . . . calipers to measure the fins at the base which is where I
 17 felt the most relevant dimension was because the base of the fins is
 18 where the most heat transfer occurs. As fins -- you go up in fin
 19 height, they become less effective. And so to me, the base was the
 20 relevant dimension to measure it at. And I got readings, . . . between
 21 [0.9] and 1.0[.]

22 Docket No. 422-3 (Ex. A, 12/20/21 Tuckerman Depo.) at 137:9-138:13.

23 Dr. Pokharna later emphasized the unreliability of such methods because “at the base it is
 24 fraught with most errors and . . . inconsistencies” because “there is a possibility of making a
 25 measurement that is smaller than the tool that was used to create that gap” that is “clearly
 26 inconsistent and not really representative of the gap.” Docket No. 443-2 (Ex. 23 1/10/2022)
 27 Pokharna Dep.) at 118:13-122:21. At the second supplemental deposition on March 18, 2022, Dr.
 28 Tuckerman further testified that he “put calipers at the bottoms of the grooves, which is where
 29 they would be narrowest -- that’s the way the machining works -- and looked . . . to see if any
 30 exceeded a millimeter, and they didn’t.” Docket No. 422-4 (Ex. B, 3/10/22 Tuckerman Depo.) at

1 8:23-9:12.

2 a. Rule 26 and Scope of Dr. Tuckerman's Testimony

3 Rule 26 requires expert reports to be a “complete statement of all opinions the witness will
 4 express and the basis and reasons for them” inclusive of “the facts or data considered by the
 5 witness forming them[.]” Fed. R. Civ. Proc. 26(a)(2)(B). “[S]ubsequently-given deposition
 6 testimony is not a substitution for adequate disclosure in the expert’s original report.” *Asetek*
 7 *Danmark A/S v. CMI USA, Inc.*, No. 13-CV-00457-JST, 2014 WL 6997670, at *1 n.1 (N.D. Cal.
 8 Dec. 9, 2014); *accord Foshee v. Zuniga*, No. 20-CV-00132-VKD, 2021 WL 1947560, at *8 (N.D.
 9 Cal. May 14, 2021). Failure under Rule 26(a) may result in exclusion “unless the failure was
 10 substantially justified or is harmless.” Fed. R. Civ. P. 37(c)(1).

11 Asetek argues that the additional disclosure regarding his methodology at his deposition
 12 merely elaborates his report and that CoolIT has not shown any harm from the belated explanation
 13 of his methodology. Docket No. 422 at 5-6. CoolIT points out that a deficient expert report
 14 cannot be cured through subsequent depositions. Docket No. 443 at 6. CoolIT argues that Dr.
 15 Tuckerman’s failure to provide his methodology resulted in its inability to independently test and
 16 opine on the reliability of Dr. Tuckerman’s opinion and methodology. *Id.* at 7. CoolIT cites
 17 various cases in which expert opinions were excluded for violating Rule 26. Docket No. 443 at 5-
 18 6 (citing *Salgado by Salgado v. Gen. Motors Corp.*, 150 F.3d 735, 741 n.6 (7th Cir. 1998)
 19 (“Expert reports must include ‘how’ and ‘why’ the expert reached a particular result, not merely
 20 the expert’s conclusory opinions.”); *Alvarado v. FedEx Corp.*, No. C 03-2659 SI, 2006 WL
 21 1761276, at *3–4 (N.D. Cal. June 27, 2006); *Atmel Corp. v. Info. Storage Devices, Inc.*, 189
 22 F.R.D. 410, 411–12, 416 (N.D. Cal. 1999)).

23 CoolIT’s cases are generally inapposite. Several of them were precluded because the late
 24 disclosure came on the eve of trial, was produced almost two years after the close of discovery or
 25 was solicited by counsel on redirect rather than as responses to questions by the opposing counsel.
 26 *CMI USA, Inc.*, 2014 WL 6997670, at *2; *Foshee*, 2021 WL 1947560, at *8; *Edwards*
 27 *Lifesciences Corp. v. Meril Life Scis. Pvt. Ltd.*, No. 19-CV-06593-HSG, 2022 WL 254348, at *7
 28 (N.D. Cal. Jan. 27, 2022). *Atmel* is inapposite because the court declined to find the expert

1 report's inadequate methodology harmless because it "reflect[ed] deliberate litigation tactics, not
 2 an inadvertent oversight or an excusable lapse." *Atmel Corp.*, 189 F.R.D. at 410–12 ("Atmel's
 3 expert decided, at counsel's direction, to sit back and wait to see what the other side came up with
 4 and then rebut that limited universe."). In *Alvarado*, the plaintiff provided new opinions that were
 5 previously available in an affidavit after his deposition. *Alvarado*, 2006 WL 1761276, at *3–4
 6 ("Throughout this litigation, plaintiffs' counsel have repeatedly displayed a flagrant disregard for
 7 the Federal Rules of Civil Procedure and the Local Rules of this Court. The Court will not permit
 8 such behavior[.]").

9 Here, Dr. Tuckerman's initial failure explicitly to discuss his methodology does not appear
 10 to be such gamesmanship, and CoolIT does not claim that new depositions are warranted.
 11 Furthermore, Dr. Pokharna has already addressed the reliability of Dr. Tuckerman's methodology
 12 in his deposition. CoolIT had more than two months between the initial and supplemental
 13 depositions, and there is almost a year between the depositions and trial. In addition, CoolIT had
 14 the opportunity to provide competing expert opinions on the matter, as CoolIT served its own
 15 expert report providing competing measurements. Therefore, Dr. Tuckerman's failure to disclose
 16 his measuring method in his report seems to be an unintentional and harmless omission that has
 17 already been remedied. Because the omission was harmless, the exclusion of Dr. Tuckerman's
 18 opinion is not warranted under Rule 37(c)(1).

19 b. Reliability

20 As for CoolIT's challenge of Dr. Tuckerman's methodology as unreliable, Asetek points
 21 out that CoolIT's own expert used the same methodology – i.e., measuring the microchannels with
 22 calipers. Docket No. 422 at 4. The only difference is that Dr. Pokharna measured at the top of the
 23 channels, whereas Dr. Tuckerman measured at the base. CoolIT has not specifically identified
 24 why this location would constitute an issue of fundamental methodology rather than a mere
 25 difference in choice between the two experts. Furthermore, although Asetek argues that Dr.
 26 Tuckerman failed to record any of his measurements, this fact "go[es] to the weight and the
 27 credibility of his opinion, not its admissibility." *God Kaisha IP Bridge 1 v. Broadcom Ltd.*, No.
 28 2:16-CV-134-JRG-RSP, 2017 WL 2839492, at *1–2 (E.D. Tex. Apr. 20, 2017) ("None of

1 [CoolIT's] criticisms calls for the exclusion of [the expert's] opinion . . . [CoolIT] allege[s] that
 2 [the expert] does not show his work . . . [and] used . . . images[] that are not in his report. Even if
 3 true, these criticisms either go to the weight and credibility of his opinion, not its admissibility."')).

4 For the foregoing reasons, the Court **DENIES** CoolIT's *Daubert* motion to exclude Dr.
 5 Tuckerman's opinion regarding the microchannels.

6 D. Motion to Strike Exhibit 275 (Docket No. 389)

7 CoolIT also seeks to strike Exhibit 275, a picture of the machining document for the
 8 *Antarctica* device, used to corroborate Dr. Tuckerman's opinion that the adjacent fins measured
 9 less than 1.0mm. Asetek produced Exhibit 275 for the first time during redirect at Dr.
 10 Tuckerman's deposition on December 21, 2021. Docket No. 389 at 1. CoolIT seeks to strike
 11 exhibit 275 and any opinions based thereon. *Id.*

12 Dr. Tuckerman admitted in his deposition that Asetek's counsel provided him with Exhibit
 13 275 and that it showed "blades that they say they used with calipers measuring that blade."
 14 12/21/21 Tuckerman Dep. at 138:17-20, 139:15-18. This image includes a photo of blades, a
 15 caliper measuring 0.93mm, and a piece of paper in Danish. Docket No. 431-3 (Exhibit 275);
 16 Docket No. 389 at 2. The image includes a string of numbers and letters that Asetek claims is a
 17 "legend" in English. Exhibit 275; Docket No. 389 at 4.

18 Dr. Tuckerman did not personally review or inspect these blades, the measuring tool, or the
 19 document shown (Dr. Tuckerman does not know how to read Danish), nor ask anyone at Asetek
 20 what the materials depicted were. *See* Docket No. 389-6 (Ex. 5, 12/22/21 Tuckerman Depo.) at
 21 13:1-13; Docket No. 389-4 (Ex. 3, 3/10/22 Tuckerman Depo.) at 18:22-19:2, 22:4-16, 24:20-25.
 22 He did not independently measure the blade's thickness. Docket No. 389-4 (Ex. 3, 3/10/22
 23 Tuckerman Depo.) at 20:25-23:7. Instead, he just received the *Antarctica* sample from counsel.
 24 *See* Docket No. 389-3 (Ex. 2, 12/20/21 Tuckerman Depo.) at 141:16-142:8, Docket No. 389-4
 25 (Ex. 3, 3/10/22 Tuckerman Depo.) at 25:4-6. CoolIT argues that Asetek was obligated to produce
 26 Exhibit 275 during fact discovery and that Exhibit 275 is hearsay.

27 1. Rule 26

28 CoolIT argues that it had requested all documents concerning the alleged *Antarctica* prior

1 art product. Therefore, Asetek was obligated to produce Exhibit 275 during fact discovery at least
 2 by CoolIT's Requests for Production Nos. 99⁸ and 102⁹, and Asetek agreed to produce responsive
 3 documents. Docket No. 389 at 4, 6. CoolIT argues that such late disclosure four months after the
 4 close of fact discovery during a redirect examination resulted in prejudice. CoolIT points out that
 5 they had no opportunity to seek discovery related to Exhibit 275 or provide expert testimony
 6 related to the image. *Id.* According to CoolIT, Exhibit 275 is not simply an omitted piece of
 7 evidence to Dr. Tuckerman's Invalidity Report but a product of attorney argument. *Id.* at 5.

8 According to Asetek, they have fulfilled all their discovery obligations because CoolIT
 9 requested documents related to the *structure* of the *Antarctica* device, not documents related to the
 10 *tools* used to manufacture the product. Docket No. 414 at 1. Furthermore, Asetek argues that this
 11 delayed production was substantially justified and harmless. *Id.* at 1, 7; Fed. R. Civ. P. 37(c)(1)
 12 (information may be introduced if the parties' failure to disclose the required information is
 13 substantially justified or harmless).

14 Asetek argues that the delayed production of Exhibit 275 is substantially justified because
 15 it was a response to criticisms articulated for the first time in CoolIT's expert's rebuttal report.
 16 See Docket No. 414 at 1. CoolIT responds that Asetek may not introduce new opinions or
 17 evidence, regardless. Docket No. 432 at 5; see *Cave Consulting Grp., Inc. v. OptumInsight, Inc.*,
 18 No. 15-CV-03424-JCS, 2018 WL 1938555, at *4 (N.D. Cal. Apr. 25, 2018) (experts may not,
 19 when rebutting critiques of their opinions, "present new opinions, arguments, or evidence as

20
 21 ⁸ Request for Production No. 99 recites "All Documents concerning the *Antarctica* 'Water Chill'
 22 Liquid Cooling Kit as it existed before August 9, 2007" and Request for Production No. 102
 23 recites "All Documents concerning the design, structure, and operation of the *Antarctica* 'Water
 24 Chill' Liquid Cooling Kit as it existed before August 9, 2007, including but not limited to user
 25 manuals, installation manuals, technical manuals, specifications, engineering drawings, and other
 documentation." CoolIT's RFP No. 99 sought all documents concerning the *Antarctica* device as
 it existed before August 9, 2007. See Docket No. 389-7 (CoolIT's RFP) at 2. Asetek objected to
 this request for "all documents" as overbroad, unduly burdensome and vague, but agreed to
 produce specific categories of documents related to the device in response to other RFPs. Docket
 No. 389-8 (Asetek's objections and responses to CoolIT's RFP) at 3.

26 ⁹ CoolIT's RFP No. 102 similarly sought all documents concerning the design, structure, and
 27 operation of the *Antarctica* device as it existed before August 9, 2007. Docket No. 389-7 at 2.
 28 Asetek again objected to this request for "all documents" as overbroad, unduly burdensome, and
 vague, but agreed to conduct a reasonable search for documents sufficient to show the structure of
 the *Antarctica* device. Docket No. 389-8 at 5.

1 alternatives to opinions, arguments, or evidence that [the rebuttal experts] criticized”). According
 2 to CoolIT, the exhibit constitutes a new opinion because the experts opined on the actual channels
 3 of the *Antarctica* sample rather than the machining tool. Docket No. 432 at 5. However, it is not;
 4 Dr. Tuckerman’s reliance on Exhibit 275 is just another method to corroborate his *initial* opinion
 5 that the microchannel is spaced less than 1 mm apart. As such, Dr. Tuckerman did not articulate
 6 any new opinions or invalidity theories in connection with Exhibit 275.

7 Furthermore, Dr. Tuckerman could not have anticipated that his methodology would be
 8 criticized. *Cave Consulting*, 2018 WL 1938555, at *4 (““[E]xperts may . . . testify at their
 9 depositions regarding not only the subject matter of their initial reports but also any critiques of
 10 their opinions presented in the rebuttal reports . . . [T]rue rebuttal to criticism is permitted—facts
 11 and opinions that should have been in the original reports are not.”). Dr. Pokharna’s expert notes
 12 that Dr. Tuckerman cites deposition testimony from Mr. Erikson, the inventor of the patents,
 13 which states that the channel widths are between 0.6. to 0.8 mm, yet no evidence corroborated this
 14 testimony. Docket No. 389-5 (Dr. Pokharna Expert Report). As a direct response to this criticism
 15 that no corroborating evidence exists, Dr. Tuckerman sought evidence that could corroborate his
 16 and Mr. Erikson’s representation that the channel width is less than 1 mm. *Id.* As such, Exhibit
 17 275 does not appear to be a new opinion but a permissible true rebuttal to criticism.

18 In addition, there was no meaningful harm to CoolIT. CoolIT argues that they were
 19 harmed because they were unable to seek fact discovery. *See* Docket No. 431-2 at 9-10 (citing
 20 *Balt. Baltimore Aircoil Co., Inc. v. SPX Cooling Techs. Inc.*, No. CV CCB-13-2053, 2016 WL
 21 4426681, at *18–19 (D. Md. Aug. 22, 2016), *aff’d*, 721 F. App’x 983 (Fed. Cir. 2018). CoolIT
 22 argues that Asetek did not bother to provide CoolIT Exhibit 275 prior to Dr. Tuckerman’s
 23 deposition on December 21, 2021, and that they should have been afforded an English translation
 24 of the document, an opportunity to seek discovery on the other documents in the binder and any
 25 related documents,¹⁰ the opportunity to inspect the machining tool, blades and the measuring tool,
 26 and the opportunity to depose the Asetek employee who made the alleged measurement. *See id.*

27
 28 ¹⁰ It is not clear from Exhibit 275 that there is a binder related to the document.

1 There is some prejudice because CoolIT did not have the chance for fact discovery
2 regarding the untranslated document. *See* Docket No. 431-2 at 9. Nevertheless, CoolIT had
3 months to consider Exhibit 275 and had multiple opportunities to address it. CoolIT's counsel
4 initially did not follow up on Exhibit 275. Docket No. 414 at 5-6. Then two weeks later, in Dr.
5 Pokharna's deposition, Dr. Pokharna offered his view that it was physically impossible to make
6 something 0.9 mm wide using a 0.93 mm tool. *Id.* Judge Beeler granted CoolIT additional two
7 hours of deposition time with Dr. Tuckerman, during which he defended his position that it was
8 possible to get a narrower product using the tool. *Id.* Therefore, CoolIT questioned Dr.
9 Tuckerman regarding this exhibit in his March deposition three months after the exhibit was
10 produced, and CoolIT's expert also addressed the exhibit in his own deposition. *Id.* at 2. There
11 are also still more than six months until the trial. As such, the delay is harmless, and Exhibit 275
12 need not be excluded under Fed. R. Civ. Proc. 26 and 37(c)(1). Nonetheless, Exhibit 275 is
13 excluded on hearsay grounds.

14 2. Hearsay

15 According to CoolIT, Exhibit 275 must be excluded because it constitutes double hearsay
16 and is not of a type reasonably relied upon by experts in the field as required by *Daubert* and Rule
17 703, especially when it was never translated, and the expert is unable to read the document.
18 Docket No. 443 at 7-8 (citing *Tubular Rollers, LLC v. Maximus Oilfield Prod., LLC*, No. 4:19-
19 CV-03113, 2021 WL 5991744, at *1-2 (S.D. Tex. Dec. 16, 2021) (excluding expert opinions
20 grounded in double hearsay)); Docket No. 431-2 at 9.

21 Asetek argues that Dr. Tuckerman identified the English portions of the image as a
22 "legend," but the word "legend" is not used by Dr. Tuckerman. Dr. Tuckerman merely used these
23 numbers and letters and deduced their significance. *See* Docket No. 389-3 at 261:20-264:15.
24 Furthermore, although Asetek contends that Dr. Tuckerman could read portions of the exhibit
25 because the box labeling was in English, the relevant portion is a truncated string of numbers and
26 letters that read: "317 KEYW . . . 25 50X1x1 . ." *See* Exhibit 275; Docket No. 414 at 12;
27 Docket No. 414-4 (Ex. B, 3/18/22 Tuckerman Depo.) at 89:24-94:15. Dr. Tuckerman testified:

28 **A. It's my understanding that [Exhibit 275] Asetek's assertion**

1 **that this is the blade that was used to cut the microchannels**, and
 2 it is evident from the picture that it had a [thickness] of 0.93
 3 millimeters, which . . . Asetek asserts that that box contains, I
 4 believe, the saw blades. And [from] the labeling on the box, I am a
 5 making an **inference from the 50-by-1-by-13**, that the 50 is
 6 **probably a blade diameter**, and the 1 refers to the thick -- the
 7 nominal thickness of the cut that it's supposed to make. In other
 words, you know, if you're trying to make a nominal 1-millimeter
 8 cut, you're going to use a blade that is thinner than that because
 9 there's what's called a kerf width that you always get when you cut.
 10 So it always -- you always end up with a groove that's a little larger
 11 than your blade. But that blade would be consistent with the kind of
 12 channels I saw on *Antarctica*.
 13

14 Docket No. 389-3 at 261:20-264:15.

15 Asetek argues that a knowledgeable Asetek witness will establish the foundation and
 16 admissibility of Exhibit 275 at trial and that Rule 703 allows experts to assume the truth of facts
 17 and hypotheticals in their opinions. Docket No. 414 at 14; Docket No. 422 at 10. Asetek also
 18 argues that because Dr. Tuckerman may base his expert opinions on hearsay if experts in the
 19 particular field would reasonably rely on them in forming an opinion under Rule 703, he did not
 20 have to personally inspect the blades and could assume that the blades in Exhibit 275 were used to
 21 cut the channels of the *Antarctica* device. Docket No. 422 at 9. Finally, Asetek also argues that
 22 any doubt on Exhibit 275's reliance goes to the weight of the evidence rather than admissibility.
 23 *Id.* at 15.

24 “[D]ata relied on by the expert ‘need not be admissible for the opinion to be admitted’ if
 25 experts in the field would reasonably rely on such data.” *Power Integrations, Inc. v. Fairchild*
 26 *Semiconductor Int'l, Inc.*, 711 F.3d 1348, 1373 (Fed. Cir. 2013) (quoting Fed. R. Evid. 703).
 27 However, this does not mean that an expert may base his opinions on any evidence, and “[t]he trial
 28 judge must have considerable leeway in deciding how to determine whether the expert’s testimony
 is sufficiently reliable.” *Id.* (quoting *Kumho Tire Co.*, 526 U.S. at 152). In addition, the Federal
 Circuit noted that “Rule 703 does not make admissible otherwise inadmissible evidence”:

29 [A]lthough Rule 703 “permit[ted] experts some leeway” in basing
 30 their opinions on inadmissible evidence, “a party cannot call an
 31 expert simply as a conduit for introducing hearsay under the guise
 32 that the testifying expert used the hearsay as the basis of his
 33 testimony.” Rather, the court explained, “[t]he appropriate way to
 34 adduce factual details of specific past events is, where possible,
 35 through persons who witnessed those events.”

1 Rule 703 was not intended to abolish the hearsay rule and to allow a
 2 witness, under the guise of giving expert testimony, to in effect
 3 become the mouthpiece of the witnesses on whose statements or
 opinions the expert purports to base his opinion.

4 *Wi-LAN Inc. v. Sharp Elecs. Corp.*, 992 F.3d 1366, 1375 (Fed. Cir. 2021) (quotation marks and
 5 citations omitted). In *Wi-LAN Inc.*, the Federal Circuit found that evidence “could not be admitted
 6 under Rule 703 because it was not authenticated and, as a result, [the plaintiff] was attempting to
 7 use Rule 703 as a “‘backdoor’ to allow the admission into evidence of otherwise inadmissible
 8 declarations and other materials simply because they might assist the jury’s evaluation of an
 9 expert’s opinions.” *Id.* The Federal Circuit also held that the expert’s testimony relying on the
 10 inadmissible evidence was also inadmissible because the plaintiff failed to establish that experts in
 11 the field “reasonably rely on” the unauthenticated source code. *Id.* at 1376 (“[I]t is the judge who
 12 makes the determination of reasonable reliance, and ... for the judge to make the factual
 13 determination under Rule 104(a) that an expert is basing his or her opinion on a type of data
 14 reasonably relied upon by experts, the judge must conduct an independent evaluation into
 15 reasonableness.”).

16 In *Tubular Roller*, the defendant disputed an expert’s reliance on information that was
 17 provided to him by a person who never saw the product but watched a video and later passed what
 18 he gleaned from the video to the expert. *Tubular Rollers, LLC v. Maximus Oilfield Prod., LLC*,
 19 No. 4:19-CV-03113, 2021 WL 5991744, at *1 (S.D. Tex. Dec. 16, 2021). The court explained:

20 Rule 703 contemplates that an expert can rely on hearsay or other
 21 inadmissible facts or data. This Court has not found any authority—
 22 nor has it been cited to any authority—that an expert can reasonably
 23 rely on double hearsay relayed to him/her by an employee of a party
 with a vested interest in the outcome of the case.
 . . .

24 Neither party has suggested that this kind of hearsay is the kind of
 25 information that engineers normally rely upon while performing
 26 their day jobs. The Court, therefore, excludes all evidence based
 27 solely upon Dr. Wooley’s reliance on Henkes’ viewing of a video
 28 purporting to be Maximus’ product. It might be a different story if
 Dr. Wooley had actually taken the trouble to view the film himself
 but relying on a third person to watch the video and tell him what
 was in it goes way beyond the boundaries of Federal Rule of
 Evidence 703.

1 *Id.* at *1-*2.

2 Likewise, Dr. Tuckerman’s reliance on inadmissible double hearsay is, in this instance,
 3 improper. Asetek’s vague representation that an Asetek witness will lay out the foundation and
 4 admissibility of Exhibit 275 at trial is insufficient. This is especially true when Dr. Tuckerman
 5 does not rely on Exhibit 275 for forming his own opinions but merely “corroborates” his own
 6 theory with an unidentified person’s work without any analysis. Whether a specific device
 7 measured 0.93mm is not a fact that experts would reasonably rely on in the field. Furthermore, it
 8 is especially improper for Dr. Tuckerman to rely on another person’s measurement when the
 9 expert opinion is the measurement itself rather than a fact he relies on. Therefore, Asetek’s
 10 attempt to use the photo as corroborating evidence is an **attempt to adopt the hearsay document**
 11 **itself as expert opinion.** Although Dr. Tuckerman relies on Exhibit 275 in his testimony, he did
 12 not (and would not be able to) establish Exhibit 275 as a reliable authority because he was simply
 13 given the document by Asetek’s counsel and does not know where the document came from and
 14 who took the photo.

15 Accordingly, the Court **GRANTS** CoolIT’s motion to strike Exhibit 275.

16 E. Motion to Strike Tuckerman Report (Docket No. 401)

17 Patent Local Rule 3–3(b) requires that the party opposing patent infringement and
 18 asserting invalidity identify “[w]hether each item of prior art anticipates each asserted claim or
 19 renders it obvious.” Patent L.R. 3–3(b). Patent Local Rule 3–3(c) requires invalidity contentions
 20 to include “an identification of any combinations of prior art showing obviousness.” The party
 21 must include “[a] chart identifying where specifically in each alleged item of prior art each
 22 element of each asserted claim is found[.]” Patent L.R. 3–3(c). CoolIT seeks to strike allegedly
 23 new invalidity theories in Dr. Tuckerman’s Invalidity Report and assertion of a reference that is
 24 estopped. Docket No. 401 at 2.

25 1. Belated Disclosure of a New Theory

26 According to CoolIT, Dr. Tuckerman’s Invalidity Report now includes a new invalidity
 27 theory that a POSITA could have modified *Antarctica*’s heat spreader plate to form microchannels
 28 and separated the alleged “housing” and “plate” regions to insert a seal in between. *Id.*; Docket

1 No. 433 at 2. Defendants accuse Dr. Tuckerman of attempting to assert these new theories after
 2 realizing that *Antarctica*'s channel widths exceed 1 millimeter. Docket No. 433 at 4. The Court
 3 considers whether Dr. Tuckerman's opinion is an impermissible new obviousness theory or
 4 "permissible specifications of [a] previously disclosed theor[y.]" Docket No. 433 at 4-5 (quoting
 5 *Finjan, Inc. v. Sophos, Inc.*, No. 14-CV-01197-WHO, 2016 WL 2988834, at *13 (N.D. Cal. May
 6 24, 2016)).

7 a. Microchannel

8 Asetek argues that Dr. Tuckerman's Invalidity Report does not raise new invalidity
 9 theories because Asetek had already disclosed that *Antarctica* has microchannels in its
 10 obviousness claim charts, in line with Dr. Tuckerman's opinion that *Antarctica* has microchannels.
 11 *See, e.g.*, Docket No. 401-3 at 2; Docket No. 401-4 at 2; Docket No. 401-5 at 1; Docket No. 401-6
 12 at 1.

13 Asetek primarily relies on *Fujifilm Corp. v. Motorola Mobility LLC*, No. 12-CV-03587-
 14 WHO, 2015 WL 757575, at *31 (N.D. Cal. Feb. 20, 2015) to argue that the Patent Local Rules do
 15 not require an explanation of motivation. However, this case is inapposite. In *Fujifilm*,
 16 Motorola's expert reports included explanations of motivation to combine that were significantly
 17 different from those that were previously disclosed. *See id.* However, Motorola argued that "the
 18 Patent Local Rules do not require the disclosure of motivations to combine, so long as the accused
 19 infringer's invalidity contentions include otherwise adequate explanations of why the relevant
 20 prior art references render the asserted claims obvious." *Id.* The court noted that the prior local
 21 rule required the disclosure of the motivation to combine, but the then current rule does not have
 22 this requirement. *Id.* at *32. Therefore, Fujifilm failed to show that "the undisclosed motivations
 23 to combine it seeks to strike constitute new invalidity theories, as opposed to more specific
 24 articulations of previously disclosed ones." *Id.*

25 Unlike Motorola, Asetek did not identify the microchannels as an obviousness theory.
 26 Although the entire claim chart contains the heading: "Anticipated by *Antarctica* or obvious in
 27 view of *Antarctica*," there is no indication that microchannels will be considered under an
 28 obviousness theory. In contrast, other obviousness theories are clearly indicated. For example,

1 Asetek’s obviousness theory that if the housing and the plate in *Antarctica* were “not connected, it
 2 also would have been obvious to provide a gasket [i.e., a seal] between the plate and the housing
 3 [of *Antarctica*] to seal the inlet and outlet openings and prevent short-circuiting of the fluid” is
 4 clearly stated in the invalidity contentions. Docket No. 401-3 at 5, 8-9, 11; Docket No. 401-4 at 9,
 5 20, 29; Docket No. 401-5 at 2; Docket No. 401-6 at 14. Because Asetek had not disclosed this
 6 obviousness theory regarding the microchannel in its invalidity contentions, Dr. Tuckerman’s
 7 obviousness theory that *Antarctica* could have been modified to form microchannels constitutes an
 8 impermissible new theory. *Illumina, Inc. v. BGI Genomics Co.*, 559 F. Supp. 3d 1072, 1078 (N.D.
 9 Cal. 2021) (“a party may not use an expert report to introduce new . . . new invalidity theories . . .
 10 not disclosed in the parties’ infringement contentions or invalidity contentions.”).

11 Accordingly, the Court **GRANTS** CoolIT’s motion to strike regarding the obviousness
 12 theory regarding the microchannels.

13 b. Separation of the Plate and Housing

14 Asetek’s invalidity contentions state the following:

15 The housing and the plate in *Antarctica* are connected to create a
 16 seal therebetween. If they were not connected, it also would have
 17 been obvious to provide a gasket between the plate and the housing
 18 to seal the inlet and outlet openings and prevent short-circuiting of
 19 the fluid.

20 Docket No. 401-3 at 5, 8-9, 11; Docket No. 401-4 at 9, 20, 29; Docket No. 401-5 at 2; Docket No.
 21 401-6 at 14.

22 According to CoolIT, Asetek’s invalidity contention above is limited to a monolithic
 23 housing spaced apart from a plate. Docket No. 433 at 5. Therefore, CoolIT seeks to strike
 24 Asetek’s new theory that it would have been obvious to deconstruct *Antarctica*’s plastic mold and
 25 separate the “plate” and “housing” such that using a gasket would have been obvious. *Id.*
 26 Specifically, CoolIT seeks to strike a prior art, Danger Den-RBX, brought up for the first time
 27 almost two years after Asetek’s disclosure deadline, and despite the fact that the Court’s limitation
 28 to six prior art references per patent. Docket No. 42; Docket No. 401 at 5.

29 Dr. Tuckerman distinguishes Danger Den-RBX from *Antarctica* as having “separate
 30 housing and plate that are mated together with a seal therebetween” which *Antarctica* lacks

1 because of the Court’s “seal” construction. *Id.* CoolIT contends that Asetek attempts to use the
 2 Danger Den-RBX as prior art that supplies this missing limitation in *Antarctica*. Docket No. 401
 3 at 5, 11; Docket No. 433 at 6. CoolIT argues that Dr. Tuckerman treats Danger-RBX as an analog
 4 to *Antarctica* by stating that if a POSITA could modify its minichannels to be microchannels,¹¹ it
 5 could satisfy the seal limitation unlike *Antarctica*, and render the ‘330 and ‘284 patents obvious.
 6 Docket No. 401 at 11. According to CoolIT, Dr. Tuckerman attempts to improperly use Danger
 7 Den-RBX as invalidating prior art, because his report (1) recites a priority date for the device, (2)
 8 treats Danger Den-RBX to fill gaps between *Antarctica* and the claims, and (3) color-codes
 9 components to the patent claim limitations and points to the device as “an obvious design
 10 alternative or modification of the *Antarctica*.” Docket No. 401 at 11; Docket No. 433 at 6, n.6.

11 Asetek responds that Dr. Tuckerman did not use Danger-Den RBX as a reference to fill
 12 gaps in *Antarctica*, because he has not opined that *Antarctica* would have been modified in view
 13 of Danger-Den RBX nor that *Antarctica* would have been combined with it. Docket No. 419 at
 14 11-12; Docket No. 419-3 (Ex. A 12/20/21 Tuckerman Depo.) at 163:10-164:6 (Dr. Tuckerman
 15 testifying that he is not “combining” *Antarctica* and Danger Den-RBX, nor is he saying that
 16 “Danger Den could stand alone on its own and be an obviousness ground”), 172:15-23. Rather, it
 17 was used merely as a background reference to establish knowledge of a POSITA and the state of
 18 the art (that (1) using “split-flow to improve thermal efficiency” was well-known prior to CoolIT’s
 19 alleged invention, and (2) fluid heat exchangers with separate “housing” and “plate” and a “seal”
 20 in between were known in the field of computer liquid cooling by August 2007—*i.e.*, the date of
 21 CoolIT’s purported invention) as well as a motivation to modify *Antarctica*. Docket No. 419 at
 22 11.

23 According to Asetek, Dr. Tuckerman does not “rely” on Danger Den-RBX; instead, he
 24

25 ¹¹ Regarding this point, Asetek responds that the suggestion to replace the minichannels to
 26 microchannels is innocuous because, just below that statement, Dr. Tuckerman notes that the
 27 *Antarctica* already has microchannels. Docket No. 401-8, ¶ 69 (“In fact, microchannels were used
 28 in highperformance heat sinks/fluid heat exchangers since the early 1980s. See, e.g., Tuckerman
 Ph.D. Thesis, Bonde, Kandlikar, Bhatti, *Antarctica*, Kang, Hamilton, Chang, etc.”). Therefore,
 Dr. Tuckerman is not relying on Danger Den-RBX to supply the allegedly missing
 “microchannels” limitation in *Antarctica*. Docket No. 419 at 13.

1 merely discusses that “to have a separate seal versus a monolithic seal is . . . an obvious change”
 2 and provides the Danger Den-RBX as “supplemental color” to his analysis. *Id.* at 12; Docket No.
 3 419-3 (Ex. A 12/20/21 Tuckerman Depo.) at 165:25-166:24). Dr. Tuckerman testified to the
 4 following regarding this matter:

5 A. Well, what I’m saying is the ’330 patent is obvious in view of
 6 *Antarctica*. . . I show the housing and plate as being a monolithic
 7 sealed assembly, but, you know, you could have separated them.
 It’s a design choice. Chang was cited as one example. Danger Den
 was cited as another example

8 . . .

9 A. . . [W]hat I’m doing is using Danger Den as just additional
 10 support for the idea that the housing and plate can be separate,
 because they certainly did that. Similarly, using Chang as a support
 11 for the obvious. It’s not saying that I had to use it because it’s
 obvious -- it’s obvious in its own right that you can separate the
 12 monolithic things and put a seal between them, but really just
 additional -- you know, for color on that point . . .

13 Docket No. 419-3 (Ex. A 12/20/21 Tuckerman Depo.) at 175:23-176:9, 176:13-177:11.

14 “Courts in this district have generally, though not uniformly, declined to strike previously
 15 undisclosed references where they are being used only as ‘background’ material, and not as
 anticipation or obviousness references.” *Finjan, Inc.*, 2016 WL 2988834, at *11. In *Finjan*, the
 16 patentee argued that the defendant’s expert was “using [the challenged] information as a means of
 17 bringing in previously undisclosed prior art references to support its obviousness theories” and
 18 “that much of the information is organized in the form of limitation-by-limitation analyses.” *Id.*
 19 The defendant argued that the expert used the information merely ‘to aid in his analysis’ and for
 20 ‘background and foundational purposes,’ not as a means of introducing ‘new obviousness
 21 combinations.’” *Id.* The court granted the motion to strike “to the extent that the references are
 22 being used as invalidating prior art references” but denied the motion “to the extent that the
 23 references are being used merely as background material.” *Id.* The court further clarified that the
 24 defendant was prohibited “from using previously undisclosed references to show that the prior art
 25 disclosed ‘other . . . limitations not covered by [the] prior art references’ disclosed in its invalidity
 26 contentions and listed in its Final Election of Asserted Prior Art.” *Id.* (citation omitted). In
 27 another case, *Largan*, the court struck portions of an export report, noting:
 28

1 [The expert] references paragraph 105 of the Shinohara '829
 2 reference not in his background section, but as an example of a
 3 reference that teaches the benefits of the selective aberration
 4 compensation provided by an inflection point and that would
 motivate modifying the Kwon '111 reference to include an
 inflection point on a surface of the third lens element. That is not
 background; it is asserted prior art.

5 *Largan Precision Co, Ltd. v. Genius Elec. Optical Co.*, No. 13-CV-02502-JD, 2014 WL 6882275,
 6 at *6 (N.D. Cal. Dec. 5, 2014).

7 Like *Largan*, the reference to Danger Den-RBX is not merely discussed in the background
 8 section. It is discussed as examples of prior art, with their components extensively discussed in
 9 color-coded comparison to the patent claim limitations. See Docket No. 401-8 (Tuckerman
 10 Invalidity Report) at 14, 27-29. Asetek claims that *Largan* runs afoul of Federal Circuit
 11 precedents that background references establishing state of the art and the knowledge and
 12 perspective of a POSITA are to be consulted in finding a motivation to combine or modify.
 13 However, these cases only suggest in a general manner that references used merely as background
 14 art should be considered by courts. *Genzyme* broadly states that “the Board may consider a prior
 15 art reference to show the state of the art at the time of the invention, regardless of whether that
 16 reference was cited in the Board's institution decision.” *Genzyme Therapeutic Prod. Ltd. P'ship v.*
 17 *Biomarin Pharm. Inc.*, 825 F.3d 1360, 1369 (Fed. Cir. 2016) (“[S]uch references can legitimately
 18 serve to document the knowledge that skilled artisans would bring to bear in reading the prior art
 19 identified as producing obviousness.” (quotation marks and citation omitted)). The *Ariosa* court
 20 found that an exhibit, which was used for the proposition that “[m]assively parallel sequencing
 21 methods were in routine use by 2008” “had to be considered by the Board even though it was not
 22 one of the three pieces of prior art presented as the basis for obviousness.” *Ariosa Diagnostics v.*
 23 *Verinata Health, Inc.*, 805 F.3d 1359, 1365 (Fed. Cir. 2015) (finding that it would be erroneous to
 24 decline “to consider [the exhibit], even as evidence of the background understanding of skilled
 25 artisans . . . simply because the brochure had not been identified at the petition stage as one of the
 26 pieces of prior art defining a combination for obviousness”). In *Rea*, the Federal Circuit found
 27 that the PTAB failed to account for critical background information that could easily explain why
 28 an ordinarily skilled artisan would have been motivated to combine or modify the cited references

1 to arrive at the claimed inventions.

2 Randall relied on [prior art to show] a familiar, even favored,
 3 approach to bulkhead stowage. . . . The Board's failure to consider
 4 that evidence—its failure to consider the knowledge of one of skill
 5 in the art appropriately—was plainly prejudicial. Once it is
 6 established that a prevalent, perhaps even predominant, method of
 7 stowing a bulkhead panel was to raise it to the ceiling, it is hard to
 see why one of skill in the art would not have thought to modify
 Aquino to include this feature—doing so would allow the designer
 to achieve the other advantages of the Aquino assembly while using
 a stowage strategy that was very familiar in the industry.

8 *Rea*, 733 F.3d at 1362-63 (Fed. Cir. 2013). However, unlike *Rea* and *Ariosa*, Dr. Tuckerman does
 9 not merely discuss the Danger Den-RBX as a well-known or favored design at the time despite his
 10 and Asetek's representation. *See Pavo Sols. LLC, Kingston Tech. Co.*, No. 8:14-cv-01352-JLS-
 11 KES, 2019 WL 8138163 at *11 (C.D. Cal. Nov. 20, 2019) (noting that “the Court must look past
 12 [Defendant's] labeling and analyze whether that which [expert] terms ‘background’ is really being
 13 used as ‘invalidating prior art,’ ” and finding an expert’s opinions to be “attempt[s], through clever
 14 labeling, to end run the Patent Local Rules and their requirement that prior art be disclosed in the
 15 invalidity contentions.”). Dr. Tuckerman first introduces Danger Den-RBX and *Antarctica*
 16 (asserted prior art) together “as examples of prior art devices that utilize split-flow to improve
 17 thermal efficiency.” Docket No. 401-8 (Tuckerman Invalidity Report) at 14. Dr. Tuckerman then
 18 notes that “the Danger Den-RBX is very similar to *Antarctica* in structure, function, and operation,
 19 except that the Danger Den-RBX has separate housing and plate that are mated together with a
 20 seal therebetween, whereas *Antarctica* has a single-piece housing and plate.” *Id.* at 27. He argues
 21 that the well-known features of the Danger Den-RBX could be used to improve *Antarctica*, such
 22 as a compliant seal that proves better contact and sealing between the plate and the heat spreader
 23 plate to force fluid to flow through the microchannel. *Id.* at 14, 29-30. He further argues that
 24 “Although the Danger Den-RBX does not include microchannels, it would have been obvious to
 25 replace the mini-channels . . . in the Danger Den-RBX with microchannels.” *Id.* at 29. Such
 26 “repeated use of claim terms (i.e., [seal/seal extending between the housing and the plate]) and the
 27 Court’s claim construction language in analyzing the [Danger Den-RBX] to demonstrate that [it]
 28 discloses the claim limitations. . . . goes beyond the use of the [Danger Den-RBX] as a mere

1 background reference and crosses the line into prior art bearing on invalidity.” *Pavo Sols. LLC v.*
 2 *Kingston Tech. Co., Inc.*, No. 814CV01352JLSKES, 2019 WL 8138163, at *11 (C.D. Cal. Nov.
 3 20, 2019), *aff’d*, 35 F.4th 1367 (Fed. Cir. 2022); *see also Largan Precision*, 2014 WL 6882275, at
 4 *6 (distinguishing using a reference only as background material with using it “in support of a
 5 particular claim element being anticipated or obvious”).

6 As such, the Court **GRANTS** the motion regarding the Danger Den-RBX.

7 2. Prior Art Chang

8 Previously, CoolIT had asked this Court to strike Anderson, Chang, and Hamilton as
 9 “patents or printed publications that reasonably could have been raised during Asetek’s previously
 10 filed inter partes review” under 35 U.S.C. § 315(e)(2). This Court granted CoolIT’s motion to
 11 strike the invalidity contentions as follows:

12 The issue at the heart of each party’s motion to strike is whether the
 13 respective parties are estopped from raising certain prior art
 14 references as grounds for invalidity . . . CoolIT has provided
 15 sufficient evidence that a skilled searcher performing a diligent
 16 search would have found the disputed references, and thus the
 17 references reasonably could have been raised at the time Asetek
 18 petitioned for IPR. . . . Given that a skilled searcher performing a
 19 diligent search could have located Hamilton, Chang, and Anderson,
 20 . . . the Court GRANTS CoolIT’s Motion to Strike.

21 Docket No. 98 at 5, 13-14.

22 Statutory estoppel under 35 U.S.C. § 315(e)(2) states:

23 The petitioner in an inter partes review of a claim in a patent under
 24 this chapter that results in a final written decision . . . may not assert
 25 . . . in a civil action arising in whole or in part under section 1338 of
 26 title 28 . . . that the claim is invalid on any ground that the petitioner
 27 raised or reasonably could have raised during that inter partes
 28 review.

35 U.S.C. § 315(e)(2). IPR is limited to invalidity grounds “that could be raised under section 102
 or 103 and only on the basis of prior art consisting of patents or printed publications.” 35 U.S.C. §
 311(b). Estoppel under § 315(e)(2) thus requires: (1) a final written decision; (2) that the
 challenged grounds fall under §§ 102 or 103; and (3) that the challenged grounds were raised or
 reasonably could have been raised during the IPR.

However, Courts have found IPR estoppel to not apply to prior art references when they

1 could not have been raised in combination with another product at IPR. *See Polaris Indus., Inc. v.*
 2 *Arctic Cat Inc.*, No. CV 15-4475 (JRT/TNL), 2019 WL 3824255, at *2-*3 (D. Minn. Aug. 15,
 3 2019) (rejecting IPR estoppel with respect to defendant's obviousness combinations because they
 4 could not reasonably have raised the combinations during the IPR because § 315(e)(2) estoppel
 5 does not apply to products); *Gen. Access Sols., Ltd. v. Sprint Spectrum LLC*, No. 2:20-CV-00007-
 6 RWS, 2021 WL 5154085, at *4 (E.D. Tex. July 21, 2021) ("IPR estoppel does not apply here.
 7 Systems art cannot be raised in IPR. Thus, the Navini System—either alone or in combination
 8 with Toshimitsu—was not raised and could not have been raised as an invalidity 'ground' in
 9 Sprint's IPR.").

10 Asetek disclosed its invalidity grounds that CoolIT's patent was "Obvious in View of
 11 *Antarctica* and Rendered Obvious by *Antarctica* in View of Chang"—in its Invalidity
 12 Contentions. Docket No. 401-2 at 4. Because the Court struck Asetek's original invalidity
 13 contentions ground on the Chang reference against the '330 patent under IPR estoppel after Asetek
 14 challenged and failed to invalidate the '330 claims, CoolIT argues that Dr. Tuckerman's reliance
 15 on Chang contravenes IPR estoppel. *See* Docket No. 98. CoolIT points out that Dr. Tuckerman
 16 asserts that "Chang discloses every limitation of the asserted claims, including a seal extending
 17 between the housing and the plate" and that the claim chart includes Chang disclosures for all
 18 limitations.¹² Docket No. 401 at 7. Therefore, CoolIT argues that Asetek merely uses *Antarctica*

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¹² However, the full text clarifies:

21 Chang discloses every limitation of the asserted claims, including a
 22 seal extending between the housing and the plate. Specifically,
 23 Chang discloses a fluid heat exchanger having a separate housing
 24 and plate (unlike the single-piece housing and plate of the
 25 *Antarctica*). Chang further includes a seal extending between the
 26 housing and the plate, as shown below.
 27
 28

A person skilled in the art in August 2007 would have known been
 motivated to modify *Antarctica* in view of Chang to have a separate
 housing and plate and a seal therebetween because of the
 manufacturing advantages and cost-effectiveness of having separate
 housing and plate.

1 to skirt IPR estoppel under 35 U.S.C. § 315(e)(2) and the Court’s Order striking its Chang-based
 2 grounds without actually relying on it.

3 Asetek responds that Dr. Tuckerman’s Invalidity Report does not advance an anticipation
 4 position based on Chang. Docket No. 419. Rather, it raises an obviousness combination based on
 5 *Antarctica in view of Chang*, which is not estopped. *Id.* Asetek assures that Dr. Tuckerman will
 6 not argue at trial that Chang alone, without being combined with *Antarctica*, invalidates CoolIT’s
 7 ‘330 patent claims. *Id.* Furthermore, Asetek argues that there is no order from the Court striking
 8 the Chang reference itself from Asetek’s invalidity contentions. Rather, CoolIT only moved to
 9 estop the prior art references as charted in the invalidity claim charts — i.e., invalidity grounds
 10 based solely on the references, and not in combination with the *Antarctica* prior art system.
 11 Docket No. 419 at 19. Asetek points out that the estoppel statute prohibits invalidity *grounds*
 12 rather than specific prior art references. *Id.* (citing 35 U.S.C. § 315(e)(2) (precluding “any ground
 13 that the petitioner raised or reasonably could have raised during [a prior IPR].”)).

14 Here, the *Antarctica* device is not a patent or printed publication. Therefore, it is prior art
 15 that could not have been raised at IPR under § 315(e)(2). It would not have been possible for the
 16 Chang reference to have been considered in combination with the *Antarctica* patent at IPR. As
 17 such, IPR estoppel does not apply. *See. Arctic Cat Inc.*, 2019 WL 3824255, at *2-*3; *Sprint*
 18 *Spectrum LLC*, 2021 WL 5154085, at *4. Furthermore, CoolIT’s concern that Asetek will argue a
 19 theory involving Chang by itself and not combined with *Antarctica* seems to be simply resolved
 20 by Asetek’s representation that Dr. Tuckerman will not argue at trial that Chang alone invalidates
 21 the patent without being combined with *Antarctica*. Docket No. 419 at 18.

22 As such, IPR estoppel does apply, and the Court **DENIES** this motion as to the Chang
 23 reference.

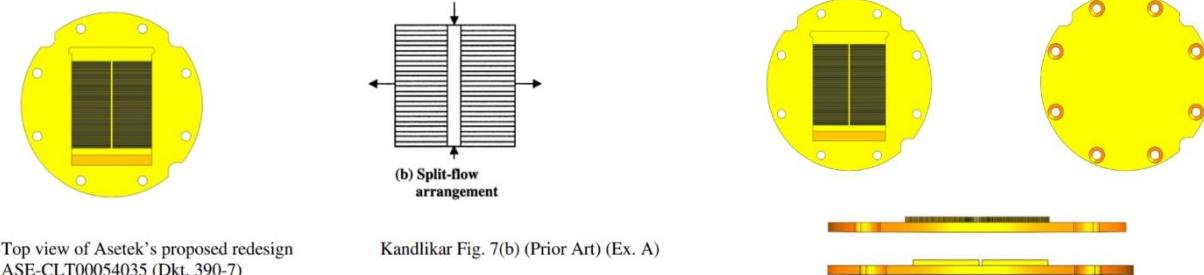
24 F. Asetek’s Late-Disclosed Noninfringing Design-Arounds

25 1. Motion to Strike Late-Disclosed Alternatives (Docket No. 390)

26 CoolIT seeks to strike Asetek’s expert opinions based on Asetek’s alleged design-arounds
 27 due to (1) late disclosure and (2) failure to meet the standard for reliability required by *Daubert*.
 28 CoolIT argues that 3D CAD files regarding these design-arounds were provided in Asetek’s

1 rebuttal expert reports more than three months after the close of fact discovery, and their samples
 2 were produced over five months after the close of discovery. In the alternative, CoolIT requests
 3 leave for further 30(b)(6) deposition testimony regarding these design-around and to serve reply
 4 reports on infringement and damages. Docket No. 390 at 2.

5 On June 25, 2019 and November 5, 2020, CoolIT requested information on “any
 6 anticipated or future changes” and explanations as to “each change that [Asetek] have made or
 7 plan to make to the design, operation, and/or use of the ASETEK ACCUSED PRODUCTS as a
 8 result of or in response to this LITIGATION and/or the COOLIT PATENTS-IN-SUIT” in its
 9 interrogatories. Docket No. 390 at 3, 5; Docket Nos. 391, Ex. 2, 3, 18, 19. Asetek’s response
 10 identified a design around “side-to-side flow arrangements in the microchannel arrays, instead of
 11 the center-to-side/split-flow arrangement.” Docket No. 391 Ex. 4 (First Suppl. Resp. to Interrog.)
 12 at 2. The redesign was specifically described as follows: “in the microchannel arrays on the heat
 13 spreader plates/heat-exchanging interfaces, cooling liquid enters each microchannel and exists at
 14 the opposite end of the microchannel. This contrasts with CoolIT’s claimed inventions where
 15 cooling liquid bifurcates into two sub-flows within each microchannel and proceeds outwardly
 16 toward the end of the microchannel.” *Id.* Asetek also provided unlabeled computer-generated
 17 images.



21 Top view of Asetek’s proposed redesign
 22 ASE-CLT00054035 (Dkt. 390-7)

Kandlikar Fig. 7(b) (Prior Art) (Ex. A)

23
 24 *Id.*; Docket No. 391 Ex. 6; Docket No. 390 at 6.

25 According to Asetek, its disclosure of the redesigns was timely because these two-
 26 dimensional (2D) CAD drawings were provided, and these 2D CAD drawings were marked and
 27 discussed during the deposition of Asetek’s 30(b)(6) witness on non-infringing alternatives, Mr.
 28 Eriksen, on August 24-25. Docket No. 424 at 3-4. CoolIT did not indicate that they did not

1 understand the 2D drawings nor requested 3D CADs at that time. *Id.*

2 Mr. Eriksen testified that these designs were “Plan B” alternative designs “that is non split-
 3 flow” in case they lost the case, that it a “work in progress” that achieves the same performance
 4 levels as the Asetek Gen 4, 5, 6, and 7 products accused of infringement in this action. Docket
 5 No. 390-4 at 194:14-25, 200:5-8. Although he was aware that the documents were created by
 6 someone in Asetek’s thermal department, he did not know the author of those documents nor
 7 when they were created. *Id.* at 189:10-14, 196:21-24.

8 Asetek argues that although Mr. Eriksen was unable to answer exactly by who and when
 9 the design was created, they were not specific Rule 30(b)(6) deposition topics. *Id.* at 4-5. Even
 10 so, Asetek provided this information in less than one week, on August 31 (the last day of fact
 11 discovery) in its fourth supplemental response. *Id.*; See Docket No. 390 Ex. 10 (Fourth Supp.
 12 Resp. Interrogatories) at 14.

13 The interrogatory responses also included an alleged simulation result of the supposed
 14 design-around, without information about how or based on what the result was produced, other
 15 than the name of the person who performed the simulation and that it took approximately 20-30
 16 hours. See Docket No. 390 Ex. 9 (Third Supp. Resp. Interrogatories), Ex. 10 (Fourth Supp. Resp.
 17 Interrogatories) at 14-15. CoolIT notes that its drawings had no labels but specified that the side-
 18 to-side design was created in the second quarter of 2021 and that they were readily available in
 19 2019 and before. *Id.*

20 Asetek also identified for the first time a new modification of the gasket that sits atop and
 21 seals the microchannels, explaining that Asetek could “square off the angled portion of the gasket”
 22 and “move the outlet ports of the outlet headers . . . from near the outermost fins to a central
 23 location of the outlet headers” as circled below. Docket No. 390-9 (Ex. 10, Fourth Supp. Resp.
 24 Interrogatories) at 15. However, Asetek did not provide any drawing of this alleged design and
 25 provided only pictures of an existing gasket and generic descriptions of modifications that could
 26 be made to it:

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10 Docket No. 391 Ex. 10 (Fourth Supp. Resp. Interrogatories) at 15. Asetek responds that these
 11 modifications to the gasket were only conceptual at the time, and no design drawings or CADs had
 12 existed at that point. Fourth Supp. Resp. Interrogatories at 15.

13 CoolIT's opening report on September 16, 2021, and supplemental infringement report on
 14 November 3, 2021 acknowledged Asetek's redesigns but did not address them. *Id.* at 8; *see*
 15 Docket No. 325. On December 8, 2021, Asetek produced, for the first time, 3D CAD files
 16 regarding these design-arounds in Dr. Stein's rebuttal expert report and sent them to CoolIT's
 17 counsel.¹³ *See* Docket No. 390 at 7; Docket No. 391 Ex. 12 (Stein Report) ¶¶ 4, 11. The 3D
 18 CADs first became available on November 19, 2021. Docket No. 424 at 7. Expert depositions
 19 were taken one month later. At Dr. Pokharna's deposition on January 6 and 10, 2022, Dr.
 20 Pokharna refused to answer questions about the redesigns, claiming that he needed proof that the
 21 redesign was manufacturable to opine on whether the alternative design infringed CoolIT's
 22 patents. *Id.* at 9; Docket No. 438-2 at 10. Dr. Abraham, CoolIT's expert on Asetek's patents, also
 23 did not opine on Asetek's redesign. Docket No. 242 at 10.

24 Samples for the redesigns were made and available starting January 26, 2022. Docket No.
 25 242 at 10. Asetek's counsel offered to deliver them to CoolIT's counsel on February 15, 2022 and

26
 27 ¹³ Asetek had provided Dr. Stein with CAD files that were preprocessed for CFD analysis using
 28 Ansys SpaceClaim and, the Ansys SpaceClaim files were created by Dr. Stein as part of his expert
 analysis after the close of fact discovery, not by Asetek. *Id.* As such, these files were unavailable
 for Asetek to produce during fact discovery. *Id.*

1 delivered the physical samples on February 22, 2022. Docket No. 390 at 9; Docket No. 242 at 10.

2 Asetek argues that the samples and files were delivered as they first became available and
 3 that the redesign was made available to CoolIT by 2D images during fact discovery, and that
 4 CoolIT never requested any 3D CADs for months. *Id.* at 12-13. Asetek emphasizes that CoolIT
 5 should have sought clarification earlier if the 2D CADs were insufficient, as the parties had active
 6 communications and were accommodating during discovery. Docket No. 424 at 14; *Illumina,*
 7 *Inc.*, 559 F. Supp. 3d 1072 (denying motion to strike a theory that was new and filed after the
 8 close of fact and expert discovery as untimely); *accord Finjan, Inc. v. Blue Coat Sys., Inc.*, No. 13-
 9 CV-03999-BLF, 2015 WL 3640694, at *5 (N.D. Cal. June 11, 2015) (refusing to strike deficient
 10 infringement theories when the defendant did not timely move to strike and never provided notice
 11 of the deficiencies).

12 According to CoolIT, the 2D CADs are irrelevant because Dr. Stein's report relies
 13 exclusively on the belated 3D files. Docket No. 438-2 at 1. CoolIT points out that the 2D and 3D
 14 CAD files depict different designs because (1) the 2D and 3D CAD images do not resemble each
 15 other, and (2) the 2D design was described as a redesign of only the cold plate while the 3D CAD
 16 files described in Dr. Stein's report discuss changes to both the cold plate and the gasket. CoolIT
 17 argues that Asetek impermissibly introduces a new theory based on new evidence by embodying a
 18 design-around incorporating changes to both the cold plate and the gasket. Docket No. 438-2 at 8.
 19 According to CoolIT, the two were distinct alternatives, and a redesign combining the two is a
 20 new theory that CoolIT first became aware of with Asetek's rebuttal expert reports on December
 21 8, 2021, which Asetek had no chance to address. Docket No. 438-2 at 6-7.

22 CoolIT contends that Asetek's late introduction of a new design around constitutes a new
 23 theory, and Asetek is obligated to timely disclose its theories and evidence during fact discovery.
 24 Docket No. 390-2 at 12-13. The rebuttal expert reports do not rely on a new theory. In the Fourth
 25 supplemental response dated August 31, 2021, Asetek first discussed the alternative design
 26 describing the plate and the alternative design modifying the gasket. *See* Fourth Supp. Resp.
 27 Interrogatories at 14-15. Asetek identified these two different potential areas of redesign without
 28 any indications that they would be implemented together or only separately, and CoolIT does not

1 cite a case wherein a combination of possible redesigns constituted a new theory.

2 Furthermore, Asetek's delayed production of the 3D CAD files is substantially justified
 3 and harmless under Fed. R. Civ. Proc. 37(c)(1). Asetek's lack of production of the 3D CAD files
 4 until November 19, 2021 is justified because they became available on November 19, 2021, and
 5 harmless because neither party could rely on these files until that point. *See Airborne Athletics,*
 6 *Inc. v. Shoot-A-Way, Inc.*, No. CIV. 10-3785 SRN/JJK, 2012 WL 3612035, at *6 (D. Minn. Aug.
 7 21, 2012) ("Under Fed.R.Civ.P. 37(c), the failure to disclose the redesign[] . . . was substantially
 8 justified, particularly as [it] did not exist during the discovery period."). The delay between
 9 November 19 and the date the expert reports were due on December 8, 2021, such that only
 10 Asetek's experts could rely on them for the rebuttal reports, was not substantially justified.
 11 However, this delay was harmless because Dr. Pokharna refused to consider any CAD files in his
 12 report. Dr. Pokharna did not opine on the redesigns using the 2D CADs. Even after reading
 13 Asetek's rebuttal report discussing the 3D CADs, Dr. Pokharna refused to even open the 3D
 14 CADs before his deposition held a month later, claiming that it would not have been prudent for
 15 him to provide an opinion on Asetek's redesigns just based on a set of CADs. Docket No. 424 at
 16 19; Docket No. 424, Ex. F (Dr. Pokharna Dep.) at 94:2-9, 94:23-95:4. Dr. Pokharna testified in
 17 his deposition:

18 "I -- I believe it's not really prudent if we just looking at some set of
 19 CAD only in the absence of knowing if this has ever been made or if
 it is manufacturable to spend a lot of time on that to, you know,
 20 create an informed opinion about a design.

21 If it were manufacturable, if you will -- if it were made, if it were
 introduced in a market, then I could look at the CAD and say,
 22 "Okay. I mean, this CAD is to present their -- what they are
 proposing." Right now it's just Asetek's imagination maybe."
 Docket No. 424, Ex. F (Dr. Pokharna Dep.) at 94:2-20.¹⁴ Therefore, although CoolIT had a month
 23 to address the new CADs, its expert chose not to do so. Dr. Pokharna's refusal to consider the
 24 CADs because they are "just Asetek's imagination" rather than a manufacturable or manufactured
 25 product suggests that earlier production of the CADs or an additional period of time to address
 26
 27

28 ¹⁴ The parties also argue whether Dr. Pokharna said that he needed a "manufactured product." But
 his testimony states that "if it were manufacturable" then he could provide an opinion. *Id.*

1 them would not have made a difference. Therefore, the late disclosure of the 3D CAD files was
 2 harmless.

3 Accordingly, the Court **DENIES** CoolIT's motion to strike.

4 2. Motion to Exclude Portions of Dr. Mody's Expert Report (Docket No. 392)

5 CoolIT requests the Court to exclude portions of the rebuttal damages report by Asetek's
 6 damages expert, Dr. Nisha Mody. Docket No. 392 at 2. The rebuttal report identifies two
 7 redesigns of Asetek products discussed above, and the parties argue whether the alleged
 8 alternatives were available and acceptable.

9 The Patent Act provides: "the court shall award [the patent owner] damages adequate to
 10 compensate for the infringement but in no event less than a reasonable royalty for the use made of
 11 the invention by the infringer." 35 U.S.C. § 284. The burden of proving damages falls on the
 12 patentee. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009). Two
 13 alternative categories of infringement compensation are the patentee's lost profits and the
 14 reasonable royalty he would have received through arms-length bargaining. *Id.*

15 The reasonable royalty compensates the patent owner for the claimed invention's
 16 incremental improvement over the prior art or the next best commercially acceptable
 17 noninfringing alternatives if any such alternatives are shown to be available during the period of
 18 infringement. *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831 (Fed. Cir. 2010) (affirming
 19 admissibility of expert's reliance on Georgia-Pacific factors in his reasonable royalty
 20 determination, including the lack of "acceptable non-infringing alternatives . . . at the time of the
 21 hypothetical negotiation"); *Illumina Inc. v. BGI Genomics Co.*, No. 20CV01465WHOTSH, 2020
 22 WL 7047708, at *2 (N.D. Cal. Dec. 1, 2020) (citation omitted). "To prove the absence of
 23 acceptable, non-infringing alternatives, the patentee may prove either that the potential alternative
 24 was not acceptable to potential customers or was not available at the time." *Presidio Components,*
 25 *Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1380 (Fed. Cir. 2017).

26 When an alleged alternative is not on the market during the
 27 accounting period, a trial court may reasonably infer that it was not
 28 available as a noninfringing substitute at that time. The accused
 infringer then has the burden to overcome this inference by showing
 that the substitute was available during the accounting period.

1 Mere speculation or conclusory assertions will not suffice to
 2 overcome the inference. After all, the infringer chose to produce the
 3 infringing, rather than noninfringing, product. Thus, the trial court
 must proceed with caution in assessing proof of the availability of
 substitutes not actually sold during the period of infringement.
 4

5 *Grain Processing Corp. v. Am. Maize-Prod. Co.*, 185 F.3d 1341, 1353 (Fed. Cir. 1999) (citations
 6 omitted).

7 Here, there is a reasonable inference that the alleged alternative was not available as a
 8 noninfringing substitute because it was not on the market during the accounting period. *See id.*
 9 As such, the accused infringer—Asetek—has the burden to overcome this inference by showing
 10 that the substitute was available. *See id.* Whether a purported noninfringing alternative was
 11 “available” requires an assessment of whether Asetek had the “necessary materials, equipment,
 12 know-how, and experience to make an alternative product during the relevant time frame.” *TV*
Interactive Data Corp. v. Sony Corp., 929 F. Supp. 2d 1006, 1013 (N.D. Cal. 2013) (citations
 13 omitted); *Grain Processing*, 185 F.3d at 1353.

14 CoolIT points out that the product designs were never implemented and that there is no
 15 evidence to show the availability of its redesigns beyond mere speculation because Dr. Mody’s
 16 opinion is not supported by any independent evidence or analysis. Docket No. 436-3 at 1-2. She
 17 relies solely on undocumented conversations she had with Andre Eriksen and testimony by Dr.
 18 Tuckerman and Dr. Stein. Docket No. 392. Therefore, Asetek has not met the burden of proving
 19 the availability and acceptability of non-infringing alternatives. *See* Docket No. 436-3 at 1 (citing
 20 *CBOE v. ISE*, No. 07 C 623, 2013 WL 12323444, at *2 (N.D. Ill. Mar. 7, 2013) (excluding expert
 21 testimony on non-infringing alternatives that fails to cite evidence that the accused infringer
 22 contemplated the non-infringing substitute during the period of infringement)).

23 Asetek responds that Dr. Mody does not purport to opine on the availability or
 24 acceptability of the alternatives. Rather, she assumed that they were for the purpose of her
 25 analysis, which is permissible under Rule 703, which allows experts to assume the truth of facts
 26 and hypotheticals. Docket No. 415-3 at 5. Asetek points out that Dr. Mody relied on (1) Asetek’s
 27 interrogatory responses that stated that the design was available in 2019 and before, (2) testimony
 28 from Andre Eriksen, and (3) the opinions of technical experts Dr. Tuckerman and Dr. Stein. *Id.*

1 (citing Docket No. 392-3 ¶¶ 39–40 (Dr. Tuckerman’s opinion that the redesign would avoid
 2 infringement and have comparable or materially better performance); Docket No. 390-12 ¶¶ 76-81
 3 (Dr. Stein performing computer simulations of the redesign and showing that they were
 4 comparable or improved in performance and thus be an acceptable substitute); Docket No. 392-4
 5 (Eriksen providing estimated costs and the timeline for implementing the redesign and stating that
 6 he considered the redesigns to be acceptable “with hundred percent certainty”). These arguments
 7 fail for the reasons discussed below.

8 First, Dr. Mody’s reliance on Asetek’s interrogatory responses stating that the design was
 9 available in 2019 is insufficient. Dr. Mody merely copied and pasted the relevant interrogatory
 10 responses, stating that Asetek “explained” that it “could readily and easily switch to an alternative
 11 design.”¹⁵ Such “100% . . . regurgitation of what he was told” is insufficient as an expert opinion
 12 regarding a non-infringing design-around. *See Webasto Thermo & Comfort N. Am., Inc. v.*
 13 *BesTop, Inc.*, No. 16-CV-13456, 2019 WL 3334563, at *5 (E.D. Mich. July 25, 2019); Docket No.
 14 392-3 ¶ 39.

15 Second, Asetek’s reliance on Dr. Stein and Dr. Tuckerman’s testimony is also insufficient.
 16 Here, the issue is not that Mr. Mody may not rely on other experts’ testimony and opinions.
 17 However, Dr. Mody’s opinion rises and falls with Dr. Stein’s and Dr. Tuckerman’s opinions on
 18 availability and acceptability. *See* Docket No. 436-4; Docket No. 392-3 at 19 (“I understand that
 19 Dr. . . . Tuckerman and Dr. . . . Stein have also expressed opinions concerning the availability and
 20 acceptability of non-infringing designs which I have considered. I also understand, . . . that . . . if
 21 [its Gen 5, 6, and 7 products do not infringe], Asetek’s Gen 5, 6, and 7 products would be non-
 22 infringing alternatives.”). Yet, Dr. Tuckerman’s opinion and Dr. Stein’s opinion that the redesign
 23 would be comparable and acceptable as a substitute only show the acceptability of the technology
 24 (thermal performance results) and do not discuss the acceptability of the technology to Asetek’s
 25

26 ¹⁵ The interrogatory response merely states: “Asetek could readily and easily switch to an
 27 alternative design” which “was created by Anders H. Saksager . . . in approximately the second
 28 quarter of 2021[] but the design was readily available in 2019 and before, and there is no
 technological or other reason that Asetek could not have implemented them in 2019 or before.”
 Docket No. 392-3 ¶ 39.

1 customers or their availability without any discussions of Asetek's equipment, know-how, and
 2 experience to implement the alternative. Therefore, Dr. Tuckerman only addressed whether the
 3 redesigns would provide comparable performance. Docket No. 436-3 at 2. In fact, Dr.
 4 Tuckerman did not opine on Asetek's Gen 1 and Gen 2 products at all and admitted that he was
 5 not familiar with the Asetek Gen 3 device and that he never inspected the Cooler Master product.
 6 Docket No. 436-4 at 6-7; *see* Docket No. 390-12 (Ex. 13, 12/8/21 Tuckerman Report). Similarly,
 7 Dr. Stein was merely asked to simulate the redesigns. Neither opined on Asetek's ability to
 8 implement these redesigns in 2014. Docket No. 436-3 at 2; Docket No. 390-12.

9 The last remaining basis for Dr. Mody's opinion is Mr. Eriksen's representation that the
 10 redesigns would be acceptable to Asetek's customers. Dr. Mody relies on an undocumented
 11 conversation with Mr. Eriksen for the following information: Asetek has salaried employees who
 12 could modify the designs of Asetek's products. Docket No. 392-3 at 19. Asetek estimates that it
 13 would take approximately \$250,000 to redesign and the retooling costs estimated for modifying
 14 each generation. *Id.* In total, Asetek estimates implementing a redesign for all four products
 15 would cost approximately \$367,500 and could be implemented in a matter of months, and would
 16 not require any customer review, as the change would not be considered material. *Id.*

17 Although an expert is permitted to rely on foundational factual testimony from witnesses
 18 who will be available to testify at trial to their personal knowledge of them, *Oracle Am., Inc. v.*
19 Google Inc., No. C 10-03561 WHA, 2011 WL 5914033, at *1 (N.D. Cal. Nov. 28, 2011), Dr.
 20 Mody again does not provide any analysis into the acceptability of the redesign beyond relaying
 21 Mr. Eriksen's opinion that the redesigns would be acceptable and "would not require any customer
 22 review, as the change would not be considered material." Docket No. 392-3 at 19; *Webasto*
23 Thermo & Comfort N. Am., Inc. v. BestTop, Inc., No. 16-CV-13456, 2019 WL 3334563, at *6
 24 (E.D. Mich. July 25, 2019) (striking accused infringer's damages expert's testimony supported
 25 only by a conversation he had with the accused infringer's director of engineering, a lay witness);
 26 *Conceptus, Inc. v. Hologic, Inc.*, 771 F. Supp. 2d 1164, 1179 (N.D. Cal. 2010) (finding that an
 27 expert testimony that alternatives were available based on an unsworn report of its own expert that
 28 relied exclusively on private conversations with [the defendant's] personnel was double hearsay

1 and insufficient); *BesTop, Inc.*, 2019 WL 3334563, at *6 (“[A]ny opinion that the proposed design
 2 would . . . be an acceptable alternative to consumers would involve explaining to a jury what
 3 consumers valued in the [patent] and why and how the alleged proposed alternative design-around
 4 satisfied those customer preferences and demands.”).¹⁶

5 Asetek also argues that Dr. Mody only rebutted the opinions of CoolIT’s damages expert,
 6 Mr. Hansen, and did not opine on the availability and acceptability of Asetek’s redesign options.
 7 See Docket No. 392-3. Mr. Hansen had criticized that Asetek had not provided any “evidence that
 8 it would be able to offer a commercially acceptable desktop product for sale without utilizing the
 9 CoolIT Patents-in-Suit.” *Id.* ¶ 35. However, while it is permissible for an expert to rebut the
 10 criticisms of another expert, expert opinions must still be reliable. Dr. Mody’s response is, at best,
 11 a “regurgitation of what he was told” by Asetek without his own input. *Webasto Thermo &*
 12 *Comfort N. Am., Inc. v. BesTop, Inc.*, No. 16-CV-13456, 2019 WL 3334563, at *5 (E.D. Mich.
 13 July 25, 2019) (“Mr. Robinson’s Report and his testimony . . . demonstrate . . . that his entire
 14 opinion on the alleged non-infringing design around is 100% a regurgitation of what he was told
 15 in conversation . . .”).

16 Furthermore, Dr. Mody concedes that she never performed an analysis regarding whether
 17 Asetek’s 2012 Gen 1, 2, 3, and the Cooler Master Liquid 240R products would still be
 18 commercially acceptable years later. Docket No. 392 at 7 (Ex. 1 (citing 12/8/2021 Mody Reb.
 19 Rpt.) ¶ 37; Ex. 3 (1/4/2022 Mody Depo. Tr.) at 148:16-23. Dr. Mody merely points to Asetek’s
 20 responses to interrogatories. 1/4/2022 Mody Depo. Tr. at 148:16-23 (Q: How did you determine
 21 that the products Asetek sold through 2012 would be acceptable to customers in 2018, 2019 and
 22 2020? . . . A: So I’ve not done that specific analysis that you talk of . . . But . . . I explain there are
 23 responses to interrogatories regarding what would be modified[.]). The sole reference to the
 24 Cooler Master product was also a direct copy of Asetek’s interrogatory that “Asetek could also

25
 26 ¹⁶ Although Asetek argues that *Volterra Semiconductor Corp. v. Primarion, Inc.*, 796 F. Supp. 2d
 27 1025, 1040 (N.D. Cal. 2011) is analogous, this case is inapposite because it did not discuss non-
 28 infringing alternatives and found that a declaration by an expert could be attached despite lacking
 supporting documents because the expert had extensive personal knowledge and personally
 reviewed the technical documents, unlike the current case.

1 easily implement an alternative design with a side-to-side flow arrangement in the microchannel
 2 arrays like that in the Cooler Master MasterLiquid 240R[.]” Docket No. 392-3 at 7, n.45. Again,
 3 Dr. Mody’s reliance on interrogatories is insufficient. *See Acceleration Bay LLC v. Activision*
 4 *Blizzard Inc.*, No. 1:16-CV-00453-RGA, 2019 WL 4194060, at *8 (D. Del. Sept. 4, 2019)
 5 (excluding a damages expert’s assumption that earlier versions of a product are non-infringing
 6 alternatives and any damages conclusions stemming from that assumption because “none of its
 7 technical experts have opined that the earlier games are non-infringing” and “[a] damages’ expert’s
 8 assumption is not sufficient to support a damages opinion based on a particular non-infringing
 9 alternative”).

10 For the foregoing reasons, the Court **GRANTS** CoolIT’s motion regarding the availability
 11 and acceptability of Asetek’s noninfringing alternatives.

12 G. Motion in Limine to Exclude Hansen Opinions (Docket No. 405)

13 “Reasonable royalty damages are deemed the minimum amount of infringement damages
 14 ‘adequate to compensate for the infringement’ . . . Such damages must be awarded ‘for the use
 15 made of the invention by the infringer.’” *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d
 16 51, 66–67 (Fed. Cir. 2012) (citing 35 U.S.C. § 284). Analysis of reasonable royalty can look to
 17 comparable license agreements, which in turn consider whether the licenses are technologically
 18 and economically comparable and whether they arise under comparable circumstances. *See, e.g.*,
 19 *id.*; *Bio-Rad Lab’ys, Inc. v. 10X Genomics Inc.*, 967 F.3d 1353, 1372–73 (Fed. Cir. 2020).
 20 “[A]llegedly comparable licenses may cover more patents than are at issue in the action, include
 21 cross-licensing terms, cover foreign intellectual property rights, or, . . . be calculated as some
 22 percentage of the value of a multi-component product.” *Ericsson, Inc. v. D-Link Sys., Inc.*, 773
 23 F.3d 1201, 1227 (Fed. Cir. 2014). “Testimony relying on licenses must account for such
 24 distinguishing facts when invoking them to value the patented invention.” *Id.* “[T]he fact that a
 25 license is not perfectly analogous generally goes to the weight of the evidence, not its
 26 admissibility.” *Id.* However, “alleging a loose or vague comparability between different
 27 technologies or licenses does not suffice.” *LaserDynamics, Inc.*, 694 F.3d at 79; *see also Finjan,*
 28 *Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1312 (Fed. Cir. 2018) (a “surface similarity” supported

1 by “conclusory statements” is insufficient). A district court may not rely on licenses without even
2 a “discernible link to the claimed technology.” *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860,
3 870 (Fed. Cir. 2010) (“the fact that the infringing products in [the prior license] were also in the
4 computer security field and that [the infringer involved in the prior license] was a competitor” is
5 insufficient).

6 CoolIT retained Mr. Hansen as a damages expert. In his report, Mr. Hansen calculated,
7 through a hypothetical license negotiation between CoolIT and Asetek under the multi-factor
8 *Georgia-Pacific* framework, a reasonable royalty for CoolIT’s patents-in-suit equal to 7% of U.S.
9 sales of Asetek’s accused products. *See* Docket No. 404-5 (Ex. 4 (Hansen Rpt.)). Asetek disputes
10 (1) the “non-apportioned” royalty rate of 7% and (2) the “non-apportioned” royalty base totaling
11 approximately ██████████. Specifically, Asetek argues that the 7% royalty rate is unreliable
12 because Mr. Hansen erroneously considered a previous license agreement between Asetek and
13 Corsair (the “Asetek-Corsair license”) as a comparable license and relied on technical expert Dr.
14 Abraham’s unreliable opinions. Regarding the royalty base, Asetek argues that Mr. Hansen failed
15 to apportion the royalty base based on the incremental value of CoolIT’s patents-in-suit to the
16 accused product and improperly added an additional ██████████ that allegedly represents
17 Asetek’s sales of infringing products to Corsair that were subsequently resold in the U.S.

18 1. Comparability of the Asetek-Corsair License and Mr. Hansen’s Reliance on Dr.
19 Abraham’s Technical Expert Opinion

20 Asetek argues that Mr. Hansen arrived at a 7% royalty rate by using the Asetek-Corsair
21 license as a reference point without sufficiently establishing its comparability. *See* Docket No.
22 404-3 at 13-14 (citing *LaserDynamics, Inc.*, 694 F.3d at 67–70 (“[w]hen relying on licenses to
23 prove a reasonable royalty, alleging a loose or vague comparability between different technologies
24 or licenses does not suffice.”); *ResQNet.com, Inc.*, 594 F.3d at 896, 871–72 (“This court has long
25 required district courts performing reasonable royalty calculations to exercise vigilance when
26 considering past licenses to technologies other than the patent in suit.”)). Asetek Specifically
27 contends that Mr. Hansen failed to consider “the differences between (1) the licensed Asetek
28 patents (which cover full liquid cooling product systems) and corresponding royalty base in the

1 Asetek-Corsair license as compared to (2) the CoolIT patents (which cover only the cold plate)
 2 and the corresponding smaller royalty base in the hypothetical negotiation.” *See Docket No. 404-*
 3 at 13.

4 In response, CoolIT argues that the Asetek-Corsair license is a comparable license and that
 5 it is appropriate to use comparable licenses to establish a reasonable royalty rate without
 6 performing apportionment. *See Docket No. 418 at 6-10; Docket No. 417-3 (citing Vectura Ltd. v.*
7 Glaxosmithkline LLC, 981 F.3d 1030, 1041 (Fed. Cir. 2020) (“[A] party relying on a sufficiently
8 comparable license can adopt the comparable license’s royalty rate and royalty base without
9 further apportionment and without proving that the infringing feature was responsible for the
10 entire market value of the accused product.”) (citation and quotation omitted)). Specifically,
11 CoolIT argues that the “Asetek-Corsair license is itself apportioned because Asetek did not invent
12 the ‘all-in-one’ cooling system as it claims” because “[i]f it did, then the royalty rate would have
13 been closer to 100% instead of 1%–7%.” Docket No. 418 At 8. Therefore, the 7% Mr. Hansen
14 derived from the Asetek-Corsair license already “reflects the incremental value that the CoolIT
15 patents add to the Asetek cooling system.” Docket No. 418 at 8.

16 A reasonable royalty analysis based on comparable licenses requires only a showing of
 17 “baseline comparability” and “the issue of comparability is often one of sufficiency of the
 18 evidence, not admissibility.” *Bio-Rad Laboratories, Inc., 967 F.3d at 1373–74.* As such, CoolIT
 19 argues that as long as Mr. Hansen’s opinions permit the jury to properly evaluate the differences
 20 between the previous and the hypothetical licenses, the degree of comparability is “a factual issue
 21 best addressed through cross examination” rather than exclusion. *Docket No. 418 at 9-10 (citing*
22 Bio-Rad Laboratories, Inc., 967 F.3d at 1374; ActiveVideo Networks, Inc. v. Verizon Commc’ns,
23 Inc., 694 F.3d 1312, 1333 (Fed. Cir. 2012) (“The degree of comparability of the [two] license
24 agreements as well as any failure on the part of ActiveVideo’s expert to control for certain
25 variables are factual issues best addressed by cross examination and not by exclusion.”)).

26 Here, Mr. Hansen has sufficiently shown “baseline comparability” by relying on Dr.
 27 Abraham’s opinion that the Asetek cooling patents are directed toward solving similar problems
 28 for similar products and are technically comparable:

1 “Technical Comparability:

2 . . .
3 Based on input from Dr. Abraham that the Asetek Cooling Patents
4 are directed towards solving similar problems for similar products as
5 the CoolIT Patents-In-Suit, I understand that they are technically
6 comparable. However, I understand that it is Dr. Abraham’s opinion
7 that the technology claimed in each of the CoolIT Patents-In-Suit is
8 more valuable than the technology claimed in the Asetek Cooling
9 Patents because, as stated above, the CoolIT Patents-In-Suit disclose
10 the simultaneous use of microchannels and split flow features that
11 yield an optimal thermal and pressure design.”

12 Hansen Rpt. ¶¶ 69-70.

13 Mr. Hansen also finds economic comparability based on the facts that “(1) the
14 Asetek/Corsair license involves Corsair, a primary customer of both Asetek and CoolIT, and a
15 named defendant in this matter of both Asetek and CoolIT; (2) includes the same types of covered
16 products (e.g., liquid cooling products); and (3) are directed to similar end users and applications
17 (e.g., computer gaming enthusiasts, data centers).” *See* Hansen Rpt. ¶ 71.

18 Asetek suggests that Mr. Hansen’s finding of comparability is ungrounded because he
19 erroneously considered Dr. Abraham’s unreliable and overly conclusory opinions. *See* Docket
20 No. 404-3 at 14. In addition to technical comparability, Dr. Abraham also opined that CoolIT’s
21 patents are “more valuable” than Asetek’s and that “the cold plate (CoolIT’s patents-in-suit) is at
22 least as important as the other systems (five primary systems in Asetek’s accused cooling devices),
23 contributing at least 20% of the value of the product.” Hansen Rpt. ¶¶ 91, 96. Asetek disputes the
24 reliability of Dr. Abraham’s input, arguing that they did not draw upon customers’ evaluations but
25 merely Dr. Abraham’s “experience,” which cannot substitute quantitative or scientific analysis as
26 a reliable basis for expert opinions. *See* Docket No. 404-3 at 7-8 (citing *GPNE Corp. v. Apple,*
27 Inc., No. 12-CV-02885-LHK, 2014 WL 1494247, at *6 (N.D. Cal. Apr. 16, 2014) (noting that “30
28 years of experience does not constitute sufficient facts or data, or reliable principles and methods”) (citation and quotation omitted); *Open Text S.A. v. Box, Inc.*, No. 13-CV-04910-JD, 2015 WL
349197, at *6 (N.D. Cal. Jan. 23, 2015) (excluding a damages expert’s opinions because “[r]ather
than spelling out the steps she took to go from the data to the royalty rate opinion, [the expert]
cites her ‘experience’—an abstraction not visible to the eyes of the Court, the jury, and opposing
counsel, or testable in the crucible of cross-examination.”)). Asetek further points out that Dr.

1 Abraham considers the 20% he provides as a “performance value” rather than a monetary
 2 valuation, he has never seen the Asetek-Corsair license, and his expert report emphasizes the
 3 *differences* between the Asetek and CoolIT patents rather than provides a comparability opinion.
 4 See Docket No. 448-3 at 4-6; Docket No. 448-3; Abraham Jan. 5 Depo. at 107:9-109:3, 147:19-
 5 148:6; Docket No. 405-9; Hansen Depo. at 204:4-205:8; Docket No. 404-4. Asetek thus argues
 6 that it is unknown how Dr. Abraham’s input played into Mr. Hansen’s economic analysis. Docket
 7 No. 404-3 at 17.

8 With respect to CoolIT’s argument that any potential issue with Mr. Hansen’s reliance on
 9 Dr. Abraham’s input can be remedied through cross-examination, Asetek notes that expert
 10 opinions must have sufficient explanation and analysis rather than just conclusive statements to be
 11 effectively cross-examined, and “Mr. Hansen have provided no facts or data” for his comparability
 12 analysis on which a jury can rely on. Docket No. 448-3 at 6 (citing *GPNE Corp.*, 2014 WL
 13 1494247, at *6 (“Without a methodology . . . cross-examination is futile.”)).

14 Here, Mr. Hansen’s opinions are not merely conclusory. Dr. Abraham’s input is
 15 permissible because “it is routine and proper for a damages expert in a technical patent case to rely
 16 on a technical expert for background” because “[a]n expert cannot be an expert in all fields, and it
 17 is reasonable to expect that experts will rely on the opinion of experts in other fields as
 18 background material for arriving at an opinion.” *DataQuill Ltd. v. High Tech Computer Corp.*,
 19 887 F. Supp. 2d 999, 1026 (S.D. Cal. 2011) (citation omitted). Mr. Hansen also opines that
 20 Corsair is a primary customer of both Asetek and CoolIT, the licenses include the same types of
 21 covered products (e.g., liquid cooling products), and the products are directed to similar end users
 22 and applications (e.g., computer gaming enthusiasts, data centers). Hansen Rpt. ¶¶ 69-71. What
 23 Mr. Hansen provides amounts to more than a “discernable link” or a “surface similarity” between
 24 the patents. Rather than simply stating that “both patents cover [similar] technology,” Mr. Hansen
 25 does explain the “functionality enabled by the patent-in-suit as well as the functionality
 26 purportedly covered by the licensed patent and compare their economic importance.”
 27 *LaserDynamics, Inc. v. Quanta Computer, Inc.*, No. 2:06-CV-348-TJW-CE, 2011 WL 7563818, at
 28 *3 (E.D. Tex. Jan. 7, 2011). As such, Mr. Hansen establishes more than baseline comparability in

1 light of the cases where the Federal Circuit found sufficient basis for comparability. *See Bio-Rad*
2 *Laboratories, Inc.*, 967 F.3d at 1374 (finding baseline comparability because both the patents-in-
3 suit and the patents in prior licenses “related to microfluids”).

4 The fact that Dr. Abraham also provides an opinion on the differences between Asetek’s
5 and CoolIT’s patents does not invalidate his opinion regarding their technical and functional
6 similarities. *See ActiveVideo Networks, Inc.*, 694 F.3d at 1333; *Virnetx, Inc. v. Cisco Sys., Inc.*,
7 767 F.3d 1308, 1331 (Fed. Cir. 2014) (noting “differences between the licenses at issue and the
8 circumstances of the hypothetical negotiation,” but concluding that “[t]he jury was entitled to hear
9 the expert testimony and decide for itself what to accept or reject”) (citation and quotation
10 omitted).

11 In sum, Mr. Hansen provides enough factual basis for comparability that allows the royalty
12 rate from the Asetek-Corsair license to serve as a reference point for his reasonable royalty
13 analysis.

14 2. The 7% Royalty Rate

15 The Court considers whether Mr. Hansen erred in applying the maximum 7% rate under
16 the Asetek-Corsair license without taking into account that the Asetek-Corsair license covers a full
17 liquid cooling system while the CoolIT patents cover only the cold plate. CoolIT contends that the
18 1–7% royalty rate in the Asetek-Corsair license “is itself apportioned because Asetek did not
19 invent the ‘all-in-one’ cooling system.” Docket No. 418 at 8. CoolIT emphasizes that “the only
20 allegedly novel aspect of Asetek’s Patents was limited to the ‘single receptacle’ concept” and
21 having claims “drafted to cover the entire cooling system by listing various conventional
22 components . . . does not automatically make the entire cooling system novel.” *Id.* at 11.
23 Therefore, the 1–7% rate in the Asetek-Corsair license correctly reflects the *incremental value* of
24 Asetek’s invention. *Id.* Asetek responds that Asetek’s invention cannot be limited to, as CoolIT
25 claims, the “single receptacle” concept but covers many elements in an entire cooling system. *See*
26 Docket No. 448-3 at 8-9 (citing *Asetek Danmark A/S v. CMI USA, et al.*, Case No. 3:13-cv-00457-
27
28

1 JST, Docket No. 219 at 3-4).¹⁷

2 Mr. Hansen's focus on the incremental value of Asetek's invention in relying on the 1–7%
 3 rate in the Asetek-Corsair license was not erroneous. *See Elbit Sys. Land & C4I Ltd. v. Hughes*
 4 *Network Sys., LLC*, 927 F.3d 1292, 1301 (Fed. Cir. 2019) (“When the accused technology does
 5 not make up the whole of the accused product, apportionment is required.”). “[T]here is no
 6 blanket rule of quantitative apportionment in every comparable license case” and courts accept
 7 “‘built in apportionment’ for a comparable license agreement.” *Bio-Rad Laboratories, Inc.*, 967
 8 F.3d at 1376–77. This idea of “built-in” apportionment is supported by Mr. Hansen’s testimony.
 9 In response to questions regarding whether he used apportionment to account for the different
 10 scopes of the Asetek and CoolIT patents, Mr. Hansen explained that apportionment was already
 11 reflected in the analysis of the relative value of the patents. *See Hansen Depo.* at 188:11–190:15.
 12 As for the argument that the prior license relied on is not comparable or the most comparable one,
 13 the jury is free to hear evidence that the license is not comparable. *See Rad Laboratories, Inc.*,
 14 967 F.3d at 1376–77.

15 “Built-in apportionment effectively assumes that the negotiators of a comparable license
 16 settled on a royalty rate and royalty base combination embodying the value of the asserted patent.”
 17 *Vectura Limited*, 981 F.3d at 1041. “[A] party relying on a sufficiently comparable license can
 18 adopt the comparable license’s royalty rate and royalty base without further apportionment and
 19 without proving that the infringing feature was responsible for the entire market value of the
 20 accused product.” *Id.* (citation and quotation omitted) (emphasis added). As such, the question is
 21 whether CoolIT meets its burden to prove that the license is not just comparable but “‘sufficiently
 22 comparable’ in that ‘principles of apportionment were effectively baked into’ the purportedly
 23 comparable license” without further apportionment. *Omega Pats., LLC v. CalAmp Corp.*, 13 F.4th
 24 1361, 1377 (Fed. Cir. 2021) (citing *Vectura Limited*, 981 F.3d at 1041).

25
 26 ¹⁷ The jury found that: “Asetek’s patented invention is directed to a closed loop liquid cooling
 27 system in which cooling liquid is pumped continuously between a pump head and a heat radiator
 28 (positioned remote from the pump head). *Id.* Rather than connecting together multiple separate
 components (as in the prior art), Asetek’s patented pump head design combines, into a single unit,
 a pump and the claimed “reservoir” that has, among other things, dual chambers and is bounded
 by a removable cold plate.” *Id.*

1 Here, Mr. Hansen relied on a technical expert to conclude that Asetek’s patents are
 2 “directed towards solving similar problems for similar products” as CoolIT’s patents. Hansen Rpt.
 3 ¶ 70. He also opined that the real and hypothetical licenses involve the same primary customer,
 4 both include liquid cooling products, and are both directed to similar end users and applications.
 5 As such, there is sufficient comparability. *See Vectura Limited*, 981 F.3d at 1040 (finding that
 6 although the comparable license encompassed rights to more than 400 patents, the key component
 7 of the license covered “roughly very similar technologies”).

8 Even if the Court finds built-in apportionment, Mr. Hansen is still required to explain why
 9 he adopted the maximum 7% figure from the Asetek-Corsair license. *See ResQNet.com, Inc.*, 594
 10 F.3d at 873 (district court erred by considering certain licenses and adjusting “upward” the
 11 reasonable royalty rate “without any factual findings that accounted for the technological and
 12 economic differences between those licenses”). Here, Mr. Hansen relied on Dr. Abraham’s
 13 opinion that CoolIT’s patents are more valuable because they “disclose the simultaneous use of
 14 microchannels and split flow features that yield an optimal thermal and pressure design.” Hansen
 15 Rpt. ¶ 70. Asetek argues that Dr. Abraham based his opinion on his “experience,” which does not
 16 constitute a reliable methodology. Docket No. 404-3 at 15-16. However, Dr. Abraham elaborates
 17 that he has designed and helped install the technology and worked with people who use the
 18 devices in opining that “cold plate is at least as important as the other system and contributes 20
 19 percent of the value of the product.” *See* Abraham Jan. 7 Depo. at 176:17-178:7; Docket No. 405-
 20 10.¹⁸ Dr. Abraham repeatedly explained that the 20% figure is not a precise value he assigned to
 21 the cold plate but simply means that he identified five systems in Asetek’s methodology described
 22 products, and the cold plate is no less important than any other component. Abraham Jan. 5 Depo.
 23 at 111:24-113:3. He also explained that he did not need to talk to customers “about what features
 24

25 ¹⁸ “Because I — I have — I have designed, I have helped — I have students ask me how to install
 26 these things and ask me how to reduce noise, how to reduce — how to improve heat transfer.
 27 Look, I have worked in this field for over two decades; so I know what customers want. Here’s
 28 what customers want. They want their chips to be cool; they want the system to work, and they
 want low noise. And the CoolIT patent does all three of those things exemplary. And so I did not
 talk to any CoolIT’s customers in the context of this litigation. But I have decades of experience
 working with people who use these devices. So I know what they want.”

1 provide value to the Asetek products” because he “design[s] these things” and he states in his
 2 report the features that are “valuable to customers who are trying to cool electronics.” Abraham
 3 Jan. 5 Depo. at 113:4-114:2. It is unclear, and Asetek has not explained why Dr. Abraham’s
 4 failure to consult customers in the context of this lawsuit is fatal to the reliability of his opinion
 5 regarding what functions of a cooling system for electronics are important.

6 In *NetFuel, Inc. v. Cisco Systems Inc.*, a technical expert found that “security, reliability,
 7 and availability” represent at least 33% of the accused product without explaining the features that
 8 comprise the 67% of remaining value or providing some economic or factual basis other than his
 9 own “experience,” “knowledge,” and “understanding” of the product. *See* 2020 WL 1274985, at
 10 *7 (N.D. Cal. Mar. 17, 2020). A damages expert relied on the number and arrived at a 33%
 11 apportionment rate. *See id.* at *6. The court excluded the damages expert’s opinion as an
 12 impermissible “black box” without “sound economic and factual predicates.” *See id.* at *7. Here,
 13 the 20% figure represents Dr. Abraham’s evaluation of the relative value of different components
 14 rather than his precise assignment of value, and Asetek also understands that “Dr. Abraham’s
 15 ‘analysis’ related to a *relative ‘performance value’* and is not an indication that CoolIT’s patents
 16 contribute 20% of the revenue or profit.” Docket No. 404-3 at 17. Moreover, Mr. Hansen did not
 17 take Dr. Abraham’s 20% figure as it is but appears to have considered it in conjunction with other
 18 factors in arriving at his final 7% royalty rate. For example, the fact that “Asetek agreed to accept
 19 a lower royalty rate from Corsair for increased annual purchase volumes by Corsair from Asetek
 20 [but] no such royalty discounts in exchange for increased purchases would exist in the
 21 hypothetical license” puts upward pressure on the royalty rate. Hansen Rpt. ¶ 73. “The patents in
 22 the hypothetical negotiation are also assumed to be valid and infringed, which places upward
 23 pressure on the royalty rate relative to agreements that do not assume validity and infringement of
 24 the licensed patents.” Hansen Rpt. ¶ 80. It thus does not follow that Mr. Hansen erroneously
 25 relied on Dr. Abraham’s technical input based on unreliable “black box.” In sum, Mr. Hansen
 26 appears to have adequately based his proposed 7% royalty rate on a comparable prior license and
 27 provided explanations for adjustments based on the differences between the patents. *See*
 28 *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 31 (Fed. Cir. 2012) (“[W]hile

1 mathematical precision is not required, some explanation of both why and generally to what extent
 2 the particular factor impacts the royalty calculation is needed.”). The factual basis and
 3 methodologies for his opinions are clear enough to be challenged through cross-examination.

4 3. Use of Asetek’s Full Sales Revenue of [REDACTED] as the Royalty Base

5 Asetek complains that Mr. Hansen has neither shown that the [REDACTED] royalty base is
 6 limited to revenue specifically attributed to CoolIT’s asserted patents nor opined that CoolIT’s
 7 asserted patents drove Asetek’s products’ demand. *See id.* at 10. Asetek notes that because Mr.
 8 Hansen calculated the profit attributed to CoolIT’s cold plate to be 2.9% of the revenue from
 9 Asetek’s accused products, the proper royalty base should be no more than [REDACTED]—2.9%
 10 of the [REDACTED] revenue. *See id.* at 12.

11 CoolIT contends that the 2.9% figure—profit from Asetek’s accused products attributable
 12 to the SSPPU (smallest salable patent-practicing unit)—is only a guidepost for Mr. Hansen’s
 13 analysis. Docket No. 418 at 13. Mr. Hansen properly considered Dr. Abraham’s technical input
 14 that CoolIT’s cold plate (the SSPPU) contributed 20% of the *functional* or *performance* value of
 15 Asetek’s accused products, which informed Mr. Hansen’s own opinion on the relative *monetary*
 16 value.¹⁹ *See id.* at 13-14. As such, because the value of a technology enabling a product to
 17 function is not necessarily limited to the cost of the specific parts, and the 2.9% already *indicates*
 18 *royalty rate*, the [REDACTED] royalty base cannot be apportioned by multiplying it by 2.9%. *See*
 19 *id.* at 14; Hansen Rpt. ¶ 93 (“[2.9%] understates the value of the CoolIT Patents-In-Suit and their
 20 contribution to the Asetek Accused Products. Accounting for the importance and contribution of
 21 the CoolIT Patents-In-Suit, the analysis of the profits attributable to the SSPPU supports a
 22 reasonable royalty of 7%[.]”)

23 Apportionment between the patented features and the non-patented features is generally
 24 required when asserting damages unless it can be shown that the patented features of an accused
 25 product drive the demand for the entire multi-component product. *LaserDynamics, Inc.*, 694 F.3d
 26

27 ¹⁹ “Dr. Abraham informed me that the cold plate is one of five primary systems within the Asetek
 28 Accused Products, and that the cold plate is at least as important as the other systems, contributing
 at least 20% of the value of the product.” Hansen Rpt. ¶ 98.

1 at 67). This is because “calculating a royalty on the entire product carries a considerable risk that
2 the patentee will be improperly compensated for non-infringing components of that product” and
3 “care must be taken to avoid misleading the jury by placing undue emphasis on the value of the
4 entire product.” *Commonwealth Sci. & Indus. Rsch. Organisation v. Cisco Sys., Inc.*, 809 F.3d
5 1295, 1302 (Fed. Cir. 2015) (“CSIRO”) (citation and quotation omitted).

6 Nevertheless, CoolIT is correct in pointing out that SSPPU does not dictate the calculation
7 of a royalty rate. A rule that requires “all damages models to begin with the smallest salable
8 patent-practicing unit . . . is untenable. It conflicts with our prior approvals of a methodology that
9 values the asserted patent based on comparable licenses.” *Id.* at 1303 (emphasis added).
10 “[S]ophisticated parties routinely enter into license agreements that base the value of the patented
11 inventions as a percentage of the commercial products’ sales price,” and thus “[t]here is nothing
12 inherently wrong with using the market value of the entire product, especially when there is no
13 established market value for the infringing component or feature, so long as the multiplier
14 accounts for the proportion of the base represented by the infringing component or feature.”
15 *Exmark Mfg. Co. Inc. v. Briggs & Stratton Power Prod. Grp., LLC*, 879 F.3d 1332, 1349 (Fed.
16 Cir. 2018) (citing *Lucent Technologies, Inc.*, 580 F.3d at 1339).

17 Moreover, a claim does not have to cover the infringing product as a whole in order for a
18 damages expert to use the end product’s entire market value as the royalty base. In *Cisco*, the
19 court found the “[SSPPU] principle is inapplicable [because] the district court did not apportion
20 from a royalty base at all [but] began with the parties’ negotiations.” *Cisco*, 809 F.3d at 1302. The
21 court concluded that it was proper to use a \$0.9 per unit royalty rate previously proposed by the
22 accused infringer Cisco as the lower bound for the reasonable royalty analysis, noting that “this
23 starting point for the district court’s analysis already built in apportionment.” *Id.* at 1303.
24 Similarly, in *Elbit*, the court found the damages expert’s testimony “allowed the jury to find that
25 the components at issue, for purposes of apportionment to the value of a larger product or service,
26 were comparable to the components at issue in a [prior agreement], and [the defendant] introduced
27 no evidence that precluded such a finding.” 927 F.3d at 1301. “As a result, when [the damages
28 expert] used the [prior agreement] as his starting point, his analysis could reasonably be found to

1 incorporate the required apportionment.” *Id.*

2 The issue here is thus not whether Mr. Hansen can choose a different starting point than
 3 SSPPU for his reasonable royalty analysis but related to the previous inquiry of whether he has
 4 presented a sufficiently comparable license that allows for built-in apportionment. *See Cisco*, 809
 5 F.3d at 1303 (“Where the licenses employed are sufficiently comparable, this method is typically
 6 reliable because the parties are constrained by the market’s actual valuation of the patent.”);
 7 *Vectura Limited*, 981 F.3d at 1041 (“[A] party relying on a sufficiently comparable license can
 8 adopt the comparable license’s royalty rate and royalty base without further apportionment and
 9 without proving that the infringing feature was responsible for the entire market value of the
 10 accused product.”). Because the Asetek-Corsair license is sufficiently comparable, Mr. Hansen
 11 can adopt both the royalty rate and the base from the Asetek-Corsair license as his starting point
 12 and then make adjustments. *Cisco*, 809 F.3d at 1303.

13 4. Addition of Corsair’s Estimated Resales in the U.S. to the Royalty Base

14 Asetek contends that Mr. Hansen improperly added [REDACTED] the downstream sales
 15 of Asetek’s products that were ultimately shipped back to the US—to the royalty base because the
 16 figure is unreliable and largely based on speculation. *See Docket No. 404-3 at 18-19*. Mr. Hansen
 17 used Corsair’s SEC filings to find that 35%–38% of Corsair’s products had been sold in the U.S.
 18 Docket No. 418 at 15. While Asetek contends that the percentages are not specific to liquid
 19 cooling products but include a variety of Corsair’s products, CoolIT argues that Corsair’s entire
 20 business is focused on “high-performance gear for gamers and content creators” and “there is no
 21 reason to believe that the geographic breakdown for liquid cooling systems would be any different
 22 than the overall product mix.” Docket No. 404-3 at 18, n.7; Docket No. 418 at 15. Mr. Hansen
 23 multiplied Asetek’s worldwide sales to Corsair [REDACTED] by the percentages, arriving at the
 24 figures that represent Asetek’s U.S. revenue from sales to Corsair [REDACTED]. Docket No.
 25 404-3 at 19. Mr. Hansen then treats any difference between this figure and Asetek’s documented
 26 U.S. sales to Corsair as “additional U.S. revenue.”²⁰ *Id.* at 19.

27
 28 ²⁰ This calculation effectively means CoolIT gets damages on 35% of Asetek’s worldwide sales to
 Corsair, regardless of what Asetek’s U.S. sales to Corsair is on record. *See Docket No. 404-3 19;*

1 Asetek's challenge to Mr. Hansen's reliance on the SEC filing is unpersuasive. Mr.
 2 Hansen has met his burden to provide some reliable factual basis for his position that the
 3 proportion of Corsair's liquid cooling systems resold to the U.S. is the same for its overall product
 4 mix. While Asetek suggests that "CoolIT and Mr. Hansen could have, and should have, obtained
 5 actual, reliable data from Corsair," the Court is not required to exclude an expert opinion simply
 6 because of what is not included in the analysis. *See Raul Siqueiros, et al. v. General Motors LLC*,
 7 2022 WL 74182, at *6 (N.D. Cal. Jan. 7, 2022) ("While [the defendant] observations about what
 8 was not included in [the expert's] analysis is accurate, it does not necessarily follow that the facts
 9 and methodology on which [the expert] did rely are insufficient and unreliable."). As such, the
 10 Court does not find the additional revenue he computed to be speculative. Asetek is free to cross-
 11 examine him and present contrary figures to the jury.

12 5. Inclusion of Revenue for Asetek USA between June 10, 2014, and October 21,
 13 2015

14 CoolIT argues that recovery for damages incurred between June 10, 2014, and October 21,
 15 2015 should not be barred by the six-year limitation of 35 U.S.C. § 286 because the amended
 16 counterclaims adding Asetek USA as a defendant filed on October 22, 2021 relate back to the
 17 original filing of CoolIT's counterclaims in April 2019 under the relation back doctrine. *See*
 18 Docket No. 404-3 at 20. The rule provides that the amended pleading relates back only if "the
 19 party to be brought in by amendment knew or should have known that the action would have been
 20 brought against it, but for a mistake concerning the proper party's identity." Fed. R. Civ. P.
 21 15(c)(1)(C)(ii). "Relation back under Rule 15(c)(1)(C) depends on what the party to be added
 22 knew or should have known, not on the amending party's knowledge or timeliness in seeking to
 23 amend the pleading." *Krupski v. Costa Crociere S. p. A.*, 560 U.S. 538 (2010). "[A] plaintiff may

24
 25 Hansen Depo. at 161:5–14:

26 Q. And it doesn't matter what Categories 1 through 3 are in
 27 actuality, when you add your category 4 to it, they will always sum
 28 to 35 percent of Asetek's sales to Corsair outside the U.S. because of
 the way you set up your math, right?
 THE WITNESS: I believe that's mathematically correct, but I would
 want to relook at that.

1 know generally what party A does while misunderstanding the roles that party A and party B
 2 played in the ‘conduct, transaction, or occurrence’ giving rise to her claim. If the plaintiff sues
 3 party B instead of party A under these circumstances, she has made a ‘mistake concerning the
 4 proper party’s identity’ *notwithstanding her knowledge of the existence of both parties.*” *Id.* at 549
 5 (emphasis added).

6 CoolIT argues that Asetek USA knew or should have known that CoolIT’s counterclaims
 7 would have been brought against it at the time CoolIT filed the original counterclaims, but for
 8 CoolIT’s mistake of naming the wrong Asetek entity as the defendant. *See Docket No. 418* at 16-
 9 17. Both Asetek’s counsel and annual reports confirm that the officers of both Asetek entities,
 10 including the controller, were the same. *See id.* Therefore, CoolIT contends that Asetek should
 11 have known that it was involved in the infringement at issue here. *See id.* CoolIT also argues that
 12 this Court previously recognized that “CoolIT was not aware that entities other than Asetek
 13 Denmark made U.S. sales of the accused products.” *See Docket No. 332; Docket No. 418* at 16.
 14 In response, Asetek argues that it did not know or had reason to know that the counterclaims
 15 would have been brought against it because it believed that CoolIT had made an informed decision
 16 not to name Asetek USA as a defendant. *See Docket No. 448-3* at 15. Asetek argues that CoolIT
 17 made the informed decision because CoolIT knew Asetek USA’s involvement in the sales at issue
 18 5 years before CoolIT filed the original counterclaims and because CoolIT knew Asetek USA and
 19 Asetek A/S were separate entities in a previous litigation and discussed the two as separate entities
 20 at the pretrial conference. *See id.*

21 This Court’s previous finding that CoolIT did not know that Asetek USA had made U.S.
 22 sales of the accused products is irrelevant because the question is whether Asetek, not CoolIT,
 23 knew or should have known that it would have been named as a defendant but for an error in
 24 identity. *Krupski*, 560 U.S. at 548-49 (“Information in the plaintiff’s possession is relevant only if
 25 it bears on the defendant’s understanding of whether the plaintiff made a mistake regarding the
 26 proper party’s identity.”); *SMIC, Americas v. Innovative Foundry Techs. LLC*, 473 F. Supp. 3d
 27 1021, 1025 (N.D. Cal. 2020).

28 Asetek is correct in noting that “[w]hen the original complaint and the plaintiff’s conduct

1 compel the conclusion that the failure to name the prospective defendant in the original complaint
 2 was the result of a fully informed decision as opposed to a mistake concerning the proper
 3 defendant's identity, the requirements of Rule 15(c)(1)(C)(ii) are not met.” *Krupski*, 560 U.S. at
 4 552. However, the alleged “knowledge” that CoolIT was aware that Asetek USA was a separate
 5 entity is exactly what the Supreme Court found insufficient to “foreclose a finding that Rule
 6 15(c)(1)(C)(ii) has been satisfied.” *Id.* at 549 (“We disagree, however, with respondent's position
 7 that any time a plaintiff is aware of the existence of two parties and chooses to sue the wrong one,
 8 the proper defendant could reasonably believe that the plaintiff made no mistake.”). Nothing on
 9 the record “compels the conclusion” that CoolIT made a fully informed decision not to name
 10 Asetek USA when CoolIT brought its original counterclaims.

11 Asetek fails to dispute CoolIT’s argument that “Asetek USA either knew or should have
 12 known the action would have been brought against it because Asetek treats its various entities as
 13 one, as Asetek’s counsel admitted that the decision makers and officers at Asetek are “all of the
 14 same people.” Docket No. 418 at 16-17; Docket No. 316-3 at 15:15-17. As subsidiaries sharing
 15 the same name, officers, and counsel in this action, Asetek USA received sufficient notice of the
 16 action and knew or should have known that the action would have been brought against it, but for
 17 CoolIT’s mistake. *See VMG Salsoul, LLC v. Ciccone*, No. CV1205967BROCWX, 2013 WL
 18 12129402, at *8 (C.D. Cal. July 11, 2013) (finding that affiliated companies sharing a common
 19 address and counsel shared a “community of interest,” and therefore, knew or should have known
 20 about the litigation); *Englebrick v. Worthington Indus., Inc.*, No. SACV0801296CJCLGX, 2011
 21 WL 13131125, at *3 (C.D. Cal. Sept. 15, 2011) (“[A]s a matter of law, notice may be properly
 22 imputed to WCW because it is the subsidiary of WII[,]” share the same attorney, and “are related
 23 corporate entities with very similar names[.]”). Thus, Rule 15(c)(1)(C) is satisfied.

24 Because Mr. Hansen bases his reasonable royalty analysis on a comparable license and
 25 other reliable facts, opinions, and methodologies, the Court **DENIES** the motion to exclude his
 26 opinions on CoolIT’s damages under Rule 702 and *Daubert*.

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United States District Court
Northern District of California

V. CONCLUSION

For the foregoing reasons, the Court:

- **GRANTS** CoolIT's Motion to Strike Exhibit 275 (Docket No. 389);
 - **DENIES** CoolIT's Motion to Strike Last Disclosed Alleged Design Arounds (Docket No. 391);
 - **GRANTS** CoolIT's Motion in Limine to Exclude Dr. Mody's Report (Docket No. 393);
 - **GRANTS IN PART** CoolIT's Motion in Limine to Exclude Tuckerman Opinions (Docket No. 397) regarding the non-infringing alternatives, **DENIES IN PART** the motion regarding the microchannels, and dismiss the motion regarding the impeller blades opinion as **MOOT**.
 - Dismisses CoolIT's Motion in Limine to Exclude Stein Report (Docket No. 399) as **MOOT**;
 - **DENIES** Asetek's Motion in Limine to Exclude Abraham Opinions (Docket No. 400);
 - **GRANTS IN PART** CoolIT's Motion to Strike Tuckerman Report (Docket No. 401) regarding the microchannels and the Danger Den-X prior art and **DENIES-IN-PART** the motion regarding the Chang prior art;
 - **DENIES** Asetek's Motion for Judicial Estoppel (Docket No. 402); and
 - **DENIES** Asetek's Motion in Limine to Exclude Hansen Opinions (Docket No. 405).

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1 Out of an abundance of caution, the Court provisionally files the entirety of this order
2 under seal. The Court orders the parties to meet and confer to determine which parts of this order
3 should be filed under seal. The parties shall file their joint sealing request with respect to this
4 order within one week.

5 This order disposes of Docket Nos. 389, 391, 393, 397, 399, 400, 401, 402 and 405.
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7 **IT IS SO ORDERED.**

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9 Dated: September 11, 2022

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EDWARD M. CHEN
United States District Judge